

# The New York Medical Times

VOL. XVIII.

NEW YORK, APRIL, 1890.

No. 1.

## ORIGINAL ARTICLES.

### SOME CLINICAL JOTTINGS ON OUR SOUTHERN FEVERS AND THEIR TREATMENT.

BY EUGENE R. CORSON, B.S., M.D.,  
SAVANNAH, GA.

#### PART I.

IN reading over the literature on our fevers, be they malarial or non-malarial, it is easy to see that there is considerable disagreement about many important points; that the facts which rest upon a firm scientific basis are very few; and that even in the treatment of fevers recognized as purely malarial a wide range is given for individual opinion.

One thing is very evident, whatever progress is to come must be in the lines of etiology and bacteriology.

The microscope, that "*phère de l'inconnu*," which has thrown its light on much of which modern medicine may be justly proud, must throw still further light on the causes of the many fevers which still demand diagnosis and classification. While the intimate nature of fever may long elude our grasp, many specific fevers have been traced to their proximate material causes. Malaria, which has for so long a time called up only some vague notions of a miasm, is giving us indications of something material, something which it is within the possibilities of the microscope and organic chemistry to ultimately disclose.

The researches of Klebs and Tomasso-Crudeli in the Roman Campagna, though failing to satisfy modern scientific requirements, gave the first impetus to a study of the etiology of malarial and miasmatic fevers. The *bacillus malarie* of Tomasso-Crudeli was followed by the *oscillaria malarie* of Laveran, the *palmella* of Salisbury, and the researches of Sternberg, all equally unsuccessful so far as the discovery of the malarial germ, but all valuable as inciting to further research.

Dr. Sternberg, who has given us, to my mind, the best exposition of the subject,\* has done much good in calling a halt on the indiscriminate use of the term malaria for all fevers classified under the broad term of miasmatic. His showing up of the mortuary reports of New York City

from 1876 to 1878 inclusive, should be a warning to those who diagnose their fevers on the principle of *omne ignotum pro malaris*. An advance has been made in showing that many of the continued and remittent fevers are due to causes other than malaria, properly so-called, that these fevers show a mixed etiology, and that along with the malarial element there are complications which change the whole character of the disease and call for a different treatment. And further, that while quinine offers the best test, probably, of the malarial character of the fever, there are other drugs pressing close upon its heels, which are hardly second in their efficacy; and that in many forms of continued fever, I may say in most forms, quinine is quite useless, if not injurious, when given in the usual doses.

In reviewing our literature the question of diagnosis is all very plain with the classical intermittent fever and its various forms, all traceable to some paludal or telluric influences. Even the so-called larval forms, where the periodicity is marked and the history of the case points to an exposure to some marsh miasm, permit a reasonably correct diagnosis. And so, too, with the typical "malarial remittent," which, up to a certain point, gives us a definite clinical picture; but we have reached our limit here, and we jump immediately into deep water and flounder about in vain efforts to get a foothold. Here we come upon various forms of remittent fever which do not lack for any number of names, none of them, however, descriptive or characteristic, which are evidently not one and the same disease, but which are still classed as malarial. Here the quinine test fails and all other signs fail as well, and the physician who succeeds in making his patient believe that he knows it all must do some very skillful guessing, and it is truly remarkable how much ingenuity is displayed on such occasions.

Let me not forget, however, the malarial cachexia, which is not one of the medical opprobria. Here he who runs may read; the anæmia often profound, the color of the skin and mucous membranes, the facial expression, the enlarged spleen, the mental torpor, the dyspnoea and palpitation, the cardiac murmurs, the puffiness and even oedematous skin, and the characteristic history, all give us a clinical picture never to be forgotten; and what is more to the purpose, no cachexia with symptoms apparently so alarming yield more readily to judicious treatment. The physician

\* "Malaria and Malarial Diseases." By George M. Sternberg, M.D., F.R.M.S., New York. Wm. Wood & Co., July, 1884.

can do wonders here and get his patient's eternal gratitude.

In my practice in Savannah I have had to treat many cases of fever among both whites and colored, running through the entire gamut of so-called miasmatic fevers, be they malarial or not. In an attempt to classify the various forms met with we find that our classification does not carry us far, and that the many apparently larval and mixed forms defy all efforts to draw sharp lines in our diagnoses. Of pure typhoid fever we are singularly free. Probably a dozen cases cover my experience in ten years, and of these I can hardly recall a case which could not be traced to foreign infection. The patients were either railroad officials, students at school in the upper part of the State who returned home with the fever on them, or travellers just returned from other parts. And this, I believe, is the experience of other practitioners here. I believe, although I have no data to substantiate my belief, that this exemption exists along our Southern seaboard. The causes, telluric or atmospheric, of this exemption I am unable to give. And further, the fevers which show an enteric complication, which assume a typhoid character as evidenced by the dry tongue and the characteristic mental and abdominal symptoms, are not frequent. Gastric and intestinal troubles are very common with our prevailing fevers, but they are not typhoid, as the term is understood.

With the unsatisfactory state of our nosology any attempt to give an approximate estimate of the comparative frequency of the different forms of fever is worse than useless. I pick up at random, for example, the official statement of mortality for the City of Savannah for the month of July, 1889. I find here two deaths from *Febris biliosa*, one white and one colored; two deaths from *Febris congestiva*, both white; one death from *Febris typho-malarial*, colored; two deaths from *Febris remittens*, both colored; and three deaths from *Febris typhoides*, all three colored. I am certain that a sharp distinction between *febris biliosa*, *febris congestiva*, *febris typho-malarial*, and *febris remittens* is quite too much for the ordinary practitioner, and that his writing out his death certificate one or the other is a result of habit or mere individual opinion. I should certainly like to know the characteristic symptoms which differentiate these various forms. And I have doubts, too, of the genuineness of the three cases of *febris typhoides*. I should like to know whether the specific eruption was found, as well as the temperature curve and abdominal symptoms.

Woodward's old term *typho-malarial* should most certainly go; if it ever served a useful purpose it has outlived its usefulness. The name *febris biliosa* calls up no distinct clinical picture, and the term is made use of in a most loose way. *Febris remittens* means nothing except

that the course of the temperature was remittent, which may apply to almost any fever. These terms are taken from the "Nomenclature of Diseases," published by the Government for the army and navy and the marine hospital service.

I have introduced this report to show the futility of expecting anything from figures and statistics, so far as any minute diagnostic differentiation goes. The secret of this jumble of names is that we have attempted a classification ahead of our pathology; we are writing names in the shifting sands.

Could we only be content to be more general in our diagnosis and await further progress in pathology and bacteriology, which can alone warrant minute differentiation, we shall avoid endless confusion and have nothing to unlearn when a better pathology will enable us to take a step forward.

There is no doubt that the malarial poison manifests itself in many forms, and further, that it often acts in combination with other morbid agents, masking more or less the classic types of malarial fever properly so called. And in the Southern States, in fact in all tropical and subtropical countries, the telluric and atmospheric conditions favor a multitude of morbid agents, and the physician is called upon to treat the most varied forms of fever. From a clinical standpoint I am more and more impressed with the idea that while malaria in its restricted sense is probably due to one poison, be it a true germ infection, or an intoxication, as Sternberg favors, there are other agents developed and favored by similar conditions of soil and atmosphere which produce fevers resembling more or less malarial fever proper, or differing from it widely in almost every particular. Certain it is that differences in constitution and the mere quantity of the poison taken into the system are not sufficient to explain our various fevers. A disease like syphilis, for example, hydra-headed and assuming so many phases dependent upon the constitution, still manifests itself by certain characteristics which are unmistakable to the practiced eye. Typhoid fever proper, be it of a mild or severe type, shows symptoms which, when carefully studied, enable the physician to diagnose the case with assurance. But with many of our fevers there is no such assurance. There are no local inflammatory foci, at least none perceptible with our present means of clinical observation, and the symptoms and course of the disease do not enable us to draw any sharp lines in our diagnoses. Often we can go no further than the division into malarial and non-malarial, and even here the distinction is by no means marked, and there is a wide region, *inter canem et lupum*, which it is impossible to map out in any scientific way. While the classic malarial intermittents, and a form of remittent fever whose malarial character is well marked, preserve a fair similarity the world-over where

malaria is endemic, as soon as the fevers become continuous and assume any length they differ more and more according to their geographical distribution, and differences far from being explained by differences in constitution.

Whether malarial poisoning is an intoxication from breathing a poison produced by germs, or an infection from germs which enter the circulation and multiply in the blood or tissues, or an infection from germs which remain in the intestinal canal and there produce a poison to be absorbed into the blood, modern research renders more and more probable the germ theory as the cause directly or indirectly of malaria. And on this basis clinical experience points to a number of fevers caused by germs closely or remotely allied to the malarial germ. Even the dreaded yellow fever, which would seem to offer no difficulty in its diagnosis, still awaits the discoverer of its pathognomonic signs. When the disease is distinctly epidemic the diagnosis becomes easy simply by virtue of that character. But we find that in the epidemics of which we have detailed accounts the statistics are more or less vitiated by cases clearly not yellow fever, or, at any rate, over whose diagnosis there is a wide difference of opinion. I remember several years ago taking our health officer, a yellow fever veteran, to see a case diagnosed as hæmorrhagic malarial; while coinciding with the diagnosis, he said that if yellow fever were prevailing the case would be classed as yellow fever. Perhaps no fever shows more strikingly a *genius epidemicus*. At these times all the morbid agents come in to add their quota to the slaughter. Before the appearance of the epidemic so-called suspicious cases crop up like the first mutterings of the storm, cases which are often only *ex post facto* suspicious. At the time they are classed vaguely as malarial or miasmatic. Despite elaborate tables of differentiation between hæmorrhagic malarial, bilious melanuric fever, and yellow fever, the differential diagnosis looks better on paper than in practice. Despite the emphatic assertions of many, I have no confidence in their ability to diagnose a sporadic case of yellow fever in the same way and with the same assurance that we can diagnose a sporadic case of typhoid fever, small-pox or scarlet fever, *per vitam* or *post mortem*. I recall the case of the lamented Proctor, who died in New York under such distressing circumstances. The testimony and verdict in this case did not satisfy scientific requirements. I have mentioned this difficulty in diagnosis as a proof of the mixed character of many of our fevers, the variable *x* in their etiology, and the lack of pathognomonic symptoms or post-mortem signs. And this difficulty will continue until the microscope and organic chemistry demonstrate scientifically the nature and natural history of these various poisons and their effects upon the human body.

Sternberg, in his work above mentioned, treats of malarial diseases under three divisions, namely, malarial intermittent fever, continued malarial fever, and hæmorrhagic malarial fever. The first division stands out clear and distinct clinically. Under continued malarial fevers the simple malarial remittent has also a fairly distinct clinical picture, but when we come to adynamic remittent fever, pernicious remittent fever and complicated remittent fever, there is a general blur, and we look in vain for diagnostic signs. And this difficulty will continue until the microscope and organic chemistry demonstrate the nature and natural history of these various poisons.

I may perhaps illustrate graphically the impressions which my experience has forced upon me as to the mixed character of many of our fevers, and the variable *x* in their etiology. Let us draw the quadrant of a circle, and let the horizontal line represent the malarial line in cases which are typical and uncomplicated, and the perpendicular line the pure, uncomplicated typhoid; numberless lines can be drawn between the ninety degrees on the principle of the parallelogram of forces. The nearer the line approaches the horizontal and the smaller the angle, the more the fever assumes a malarial character. On the contrary, the nearer the line comes to the perpendicular and the greater the angle, the more the fever assumes an enteric character. If the enteric and malarial poisons combined equally, the resultant fever would be represented by a line at an angle of forty-five degrees. This schema has come into my mind from my belief in the varied and often compound character of many of our fevers, and I ascribe to it no other value than as a graphic representation of that idea. The recent discoveries in bacteriology and organic chemistry warrant a belief in the ultimate discovery of the fever-producing germs and the chemical changes which follow their activity.

So far as my experience goes, the common type of climatic fever here, be it malarial or not, is a continued fever of long or short duration. The classic intermittent fever, whether quotidian, tertian, or quartan, is not so common as one might suppose from the reputation of the country as a malarial hot-bed. On the contrary, we see frequently the polymorphous remittent type, sometimes yielding quickly to treatment, and again running a long and protracted course, and only stopped by its own statute of limitation. The term "remittent" is a generic one and non-descriptive; it tells us nothing but the temperature curve which may be the least important element in the case, leaving us in ignorance of the true nature of the disease. One is much struck with the elasticity of this term in Bartholow's description of remittent fever. With him, it covers everything from the simple remittent, of a few days' duration, yielding rapidly to quinine, to



the severer forms with marked enteric symptoms, and the highly congestive and hæmorrhagic forms which seem to shade off gradually into yellow fever, making the diagnosis between them virtually impracticable. Though usually a clear writer, his description calls up no distinct clinical picture.

Referring to this difficulty, he writes:

"So strong is the resemblance in these cases to yellow fever that they are doubtless often confounded during the epidemic prevalence of the latter. No means of distinction between them is so satisfactory as the action of quinine, which will arrest the one and not affect the other." This is not so. This high type of hæmorrhagic fever is more fatal than yellow fever, the majority dying despite quinine or any treatment, and this test is utterly valueless.

I can not believe that the various forms of fever loosely called "remittent" can be one and the same disease. Certainly there is no term in our medical nomenclature which is so elastic, unless it be hysteria, and this has had to yield much of its elasticity within recent years. If we can only realize that the term "remittent" means nothing and explains nothing we shall be better prepared to profit by an advance in our pathology. We shall not then have the disagreeable task of unlearning what we have vainly tried to make ourselves believe was definite knowledge.

We are frequently called upon to treat a fever here which still awaits a name, but which may be defined as "a continued fever having no specific character." When this definition was wiped out and replaced by the name "*typho-malarial fever*" we took a step backwards instead of forwards, for the fever shows nothing typhoid or malarial, using the latter term in its restricted sense. The former definition admitted our ignorance, while the latter assumed a knowledge of the disease which we did not possess. This fever may continue for weeks without apparently weakening the patient much. Four, six, and eight weeks are not unusual; I know of one case lasting three months, and I have just finished the case of an infant taken with fever when seven months old and which lasted five months. At the end of the fourth month of the fever the temperature went down almost to the normal, and it looked as if the fever would break; but it started up again, and while not so high, it ran a continued course for another month, gradually declining and leaving the little patient very much emaciated and weak, but with a good reactive power effecting a rapid convalescence. The case began with very loose bowels, and which continued more or less loose throughout the fever. The temperature in the beginning ran a high course, reaching at times 104 degrees or even 105 degrees; but it soon settled down to a steady course, rarely rising above 103 degrees, and with

an average daily temperature of about 102 degrees. The mind was perfectly clear, the appetite fair, condensed milk being its chief food. Later in the fever profuse sweats appeared, staining the linen very yellow; the urine was dark and offensive.

In the beginning an active antimalarial treatment was used—quinine, arsenic, strychnia, iron, and even Warbury's tincture, cod liver oil, and iodide of iron, but without any influence whatsoever on the fever's course. Nourishment was given to the highest assimilative powers. The arsenite of copper seemed to help the bowels more than anything else, and yet, when the fever finally ended, it was evidently quite independently of drugs. I have mentioned this case somewhat in detail because it was a unique one, and showed that resistance to all treatment which characterizes this form of continued fever.

I have before me the temperature chart of another case, running a course of twenty-eight days. It followed confinement; the mother nursed the child throughout her illness, and without any perceptible injury to self or infant. The uterine involution was normal, there was no local inflammatory trouble anywhere; no pain, and but little discomfort.

I have a similar case under treatment now, following puerperal eclampsia.

These fevers do not run a high course, the remissions are not marked, there is not apt to be much discomfort from the fever, and there is no local inflammatory trouble to account for the pyrexia; there is no swelling of the spleen, and there is no characteristic condition of the stomach and bowels; the tongue is variously furred or quite clean; perhaps a slight cough; sometimes as the fever declines more or less jaundice comes on, but this has seemed to me to be of hæmic rather than hepatic origin.

There is thus nothing for the physician to take hold of but the fever. Quinine has no power over it, and I have never treated a case which I thought for a moment had been stopped by the treatment. The fever runs its own course and is stopped by its own statute of limitation. It seems to represent the rise and fall of a race of microbes which have lived out their life and died a natural death.

The typical chill and fever is not very common with us here in the city; but this year, when the death-rate has been very low, and we have had but comparatively few cases of malignant fever, I have seen more of it than ever before. This year has been the first to test properly the introduction of artesian water, the city heretofore drinking the Savannah river water, and in the poorer districts of the city pump water drawn from a few feet below the surface. This water contained perceptible quantities of organic matter, and undoubtedly added much to the sickness of the place. In addition, many improvements



were made in the drainage of the city and surrounding country. Thus certain factors in the etiology of our fevers were eliminated, allowing freer scope to whatever malarial poison existed. This, at any rate, was my explanation of the matter, and was another evidence, to my mind, of the compound character of many of our miasmatic fevers. The cases yielded rapidly to quinine and antimalarial treatment.

A physician can not practice long in a malarial region without realizing an ever-prevailing malarial influence, ready to manifest itself when the resistive power of the patient falls below a certain level. A depression from great physical or mental fatigue, any sudden shock to the nervous system, colds, alcoholic excess, errors in diet, may start up a climatic fever which, under ordinary circumstances, would have been resisted. A child falls down stairs, sustains a great shock, and immediately a fever starts up of a miasmatic character.

These facts all point to the great value of prophylaxis, and nowhere does the old adage hold with greater force. To-day, even with the little that we do know of these miasmatic poisons, a vast deal can be done by judicious measures of prevention, both hygienic and medicinal. Quinine will be worth its weight in gold, and arsenic, strychnia, and iron are hardly second in value. Tomasso-Crudeli in Italy spoke highly of the prophylactic value of arsenic, and made considerable use of it in that way. Everything which aids and strengthens the resistive powers finds its place in our armamentarium.

Unsatisfactory as our pathology and nosology are in this domain, we can look with more hopefulness upon our therapeutics. Though we know nothing of the nature of the malarial and miasmatic fevers, we can treat them with fair success.

Quinine, though covering a large ground and of inestimable value, has its limitations, for so soon as its use passes beyond its specific influence upon malaria proper its value rapidly falls. That it is prescribed too often and in too large quantities I feel sure. We must often give the patient the benefit of the doubt and prescribe quinine when other drugs are called for, and this will continue until we can diagnose our cases better. As a tonic on general principles it is equalled and surpassed by some other drugs of a deeper action. As an antipyretic it is surpassed by antipyrine, acetanilid, and phenacetin. Its specific action is guided largely, to my mind, by the old saying, "possession is eleven points in the law." Its best action is as a prophylactic. Produce cinchonism and you keep out malaria, but let malaria get full possession and quinine finds it hard to eradicate it; and when the disease gets such complete control as to induce the malarial cachexia, you must call in other drugs. The more marked the symptoms of intermittency

and periodicity the better your results from quinine, whether the malarial influence is shown by the fever, by neuralgia, or by other symptoms. The less marked this intermittency and periodicity, and the more the fever assumes a continued type without marked remissions, the less quinine avails us. So that in those long-continued fevers, running a protracted course, without marked remissions or local inflammatory troubles, where, in fact, we can not detect any characteristic malarial symptoms, quinine has no influence other than as a general tonic, and even here I get better results from other drugs.

#### THE BIOLOGY OF THOUGHT, WITH SPECIAL REFERENCE TO THE ALIENATION OF THE MIND.

BY C. A. F. LINDORME, PH. D., M. D.,  
FORT REED, FLORIDA.

##### VIII. THE WILL.

###### A. With Reference to the Subject.

IT IS to be regretted, that at the baptismal font of "Mental Physiology," the hybridizing genius, who invented this name, did not change his mind, and put "Physiological Mentality." With the predicate "physiological" in front, the mongrel science would, perhaps, have cut less metaphysical capers. But as it is, cases of the bottom-end having got topmost are so abundant, as to make very vital parts of the investigation an airy construction of thoughtfulness, without any foundation in sensibility.

The most glaring contradictions are found in the theory of the will. In his "Principles of Mental Physiology," Carpenter places in man, *in his most elevated phase*, the will at the very head of the *ego*, as "a self-determining and self-controlling agent,"\* and the said author thinks this so philosophically evident, that he gives a *schema*, exhibiting this order of things in the whole course of mental operations,† where the will poses as the very top of intellectuality. But he tells us at the same time, that it is motives, supplied by the intellect, through the means of which the will is made to stir, being without them kept in abeyance.‡ Now, then, how does that hang, stand and go together? If the will is the climax into which, as the top-story of the whole edifice, and as an intellectual act, all mental process runs out, how can the intellect be the faculty which has the function to supply the will with motives, without which it comes to a dead point? If it be the function of the intellect to furnish motives to the will, the latter must exist not only independently of the intellect, but be previous to it, and have its anatomical corollary in an altogether different region of the body than the head.

Physiology once, by experiment, found out that

\* P. 101.

† P. 125.

‡ P. 124.

the brain is that organ of the animal body which is subservient to the intellect, and this simple fact turned the heads of the metaphysical physiologists. Forgetful of the logic necessity, that consciousness, in order to have a substance, must be a consciousness of something, and that, accordingly, this something must have preceded it, "Mental Physiology," by denying to acknowledge mind anywhere, save in an operation of the intellect, unsouled not only the latter, but man, the world and itself.

The metaphysical physiologists *in specie*, however, as much as man generally, and the world at large, being unable to live without a soul, the consequence was, that this vital faculty of creation, vegetative as well as animal, because of being organic in either case, after having been openly flung out of the front-entrance, was clandestinely let in again at the back-door, and Carpenter, in his "Principles," states "It may be fairly inferred that the intensity of any *ideational* state is the expression of the hyperæmic condition of some particular part of the cerebrum, as that of a *sensational* state is of a hyperæmic condition of some part of the sensorium."\* Theoretically, "Mental Physiology" makes the functioning of the intellect in the brain the source of the power of the will, and when its authors are aware of what they are doing, they try to maintain this theory doctrinarily. But "Mental Physiology," in its learned authors, like all other beings of frail mankind, has its weak hours, when it is not aware of what it is doing, and then it tells us things which brutally give its own theory a slap into the face, all its coquettish eruditiously cosmetic outfit notwithstanding. Although in his "Principles" Carpenter starts from the axiom that the will is the outcome of the intellect,† he states that "the will has the power of keeping some considerations out of view,"‡ and he gratifies his national benevolence by illustrating this fact with the example of Nelson, who at Copenhagen turned his blind eye to the signal of recall, for "the honor of his country,"§ bombarding a city which lay defenceless before his ships.

As long as Carpenter is physiological, all through his book, he is also scientific. But wherever his physiology turns what he calls "mental," the English common-sense, which he claims, is so obviously adulterated by the "refinements of German metaphysics," that we can not acknowledge it any more as the genuine British article, which we are proud of, cultivating it in this country as a valuable inheritance, and holding it at a premium, any time its production over the water in pure condition is continued.

Carpenter cites approvingly the proverb: "there are none so blind as those that won't see," || and

this thought is one of many nations, indeed.\* But he does not notice that this condemns his theory of the will as being an outcome of the intellect, and in consequence of this want of plan in his metaphysics he meanders all through his book on the crooked road of contradictions of the grossest kind. The corner-stone of his theory is, that all volitional action is based "on an idea of what is to be done."† But, "as Archbishop Manning has truly said, 'the memory of insults or great wrongs will arise in the mind;'"‡ we "can not prevent their rising."§ Principally, Carpenter lets the will be preceded by the conception of its purpose.|| But incidentally, elaborating upon this his theory, he says, that in case of a "hitch" or intricacy in the conception, "the will is called into play to overcome it." Now, then, this logic is somewhat after the fashion of the old aristocratic monarchy:

"And the monarch, absolute—  
If he dances as we flute."

The idea, in "Mental Physiology," is given the head in metaphysics. But should it come to pass that the will were contrary to an idea, well, yes, then it is the will which is given the head.

Carpenter calls his book "Principles of Mental Physiology," and we do not hesitate to give it credit for whatever there is physiological in it. But its metaphysical admixture, which is meant as a title for the claim of specific mentality, we can not approve of, unless warranted by what is admitted in physiology as a tacit criterion of scientific value, viz., anatomical foundation. The physiological mentalists, by putting, as an *epitheton ornaas* "mental" before the physiology-title of their text-books, do not exempt themselves from the obligation of tendering with their metaphysical hypotheses anatomical warrants. We must deny, therefore, the scientific right of Carpenter, in the hitches and intricacies of conception of his own, to avail himself of his will, putting *automaton* instead, in all those cases where anatomy fails him, and he lets what he calls "mental" take the place of honest physiology.

"Mental Physiology," on a more thorough examination, will find out itself, that it is a very strange *caprice* to eliminate from its theoretical system the subjectivity of the will, and then, on becoming horrified by the created void, to smuggle in the scientific curiosity of an *automaton*, which, on close inspection, turns out to be no more nor less than this same subjectivity of the will, which "Mental Physiology" is loth to accept, by no means because it is psychologically doubtful, physiologically without corollaries, and anatomically uncertain, but simply because "Mental Physiology" is dogmatic. The hybrid science has got it into its sinciput that the brain is the organ of the

\* L. c., p. 383.

† "All volitional action . . . is based on an idea of what is to be done," p. 384.      ‡ P. 399.      § P. 403.      || Ibid.

\* The French say *faire la sourde oreille*, and the Spaniards *no hay peor sordo que el que no quiere oir*.

† L. c., p. 384.      ‡ L. c., p. 333.      § Ibid.      || L. c., p. 376.

mind, and that there is none else besides, and it denies all the contents of the ventral cavity, blood, heart and intestines, glands, sympathetic nerves and vesicles, as partaking of mental qualities. To the mind of the metaphysical physiologist the contents of the ventral cavity are much too "low" for the high scientific purposes of "Mental Physiology," and as its authors can not help feeling a vacuum which somehow or other has to be filled up, they try to get out of the dilemma in which their conclusion from false premises has placed them, by putting *automaton*, and as this is Greek, there is no telling what an effect it may have on all those who are affective by such twisting turns of spurious erudition. But *hic Rhodus, hic salta!* as long as they can not locate their automaton, anatomically, it is neither mental nor physiological, but simply phonetic, with possibly a philological, but certainly no medical sense at all.

With "Mental Physiology" a baby has no will. It may be hungry, may yell for the breast of its nurse that the panes ring; it is not a will which moves it; it may want food, but, having not a full idea of milk, like, say a London (Eng.) professor of physiology, it has no will. A bull may get furious and run down town, flinging up into the air all he can hook; it is not a trace of will exhibited by such a feat. An inveterate drunkard may swallow whiskey, gin, or beer, by the gallon; the philosophers of inebriety will tell you that it is not the will of the inebriate which is implicated in such proceeding. A wild erotic may commit rape on a woman, or even on a child; he is not a willing individual. A gambler-habitue may lose his own and other people's money at *écarté* and *roulette*, and hang himself to boot; he is not the *ego* in which was embedded the will which was active in the tragedy. "Mental Physiology" at least says so, or, I should have said, most times does, setting down all such manifestation of positivism in individuals as *automatism*, while at other times, just according to how "Mental Physiology" is led by its mentality, it will teach differently, and lengthily elaborate upon it.

But not only that. "Mental Physiology" being left without any clear definition by the hybridizing scientists of the will and the automaton, there is in their text-books a continuous contest on the score of the sphere of legitimacy respectively. In the text-books the will, as the resultant of the idea, is topmost. But practically the *automaton* is rebellious, and then the two physio-metaphysical agencies get each other by the ears and—make a solid mess out of man, nature and "Mental Physiology." Take, for instance, the case of a boy and a girl who love each other passionately. To the mind of "Mental Physiology" there is in them altogether no will at play. It is all sheer automatism. On the contrary, will, if there be any, serves only the purpose of antago-

nizing this automatism.\* "Mental Physiology" in love-matters acknowledges a will only in the old gentleman who opposes the match, and wants the boy to bring his inclinations "under the control of reason." The hybrid science sees will not in its first stirring, not in the emotion of love, but in an opposition to it roused by an antagonistic motivation.

What anatomy is doing all the while, the metaphysical physiologists don't say. They never tried to give physiological reasons of their philosophy, let alone demonstrate it anatomically, but try to pay off the claim of sensibility by putting "Physiology" on their text-books, and continue inside in a modern revival of the extravagance of uncontrolled thoughtfulness of old-fashioned scholasticism.

The cardinal error in the premises of the metaphysical physiologists is in the assumption that the will and automatism exclude each other. The mother which "yields to her instinctive fondness for her offspring" does this "through weakness of will."† In Mozart, who can not "restrain the impulses of his ardent temperament,"‡ this is due to a "lack of will."§ "The actions of the newborn infant are entirely automatic,"|| and even "our common-sense judgments" are "largely influenced by the emotional part of our nature—our individual likes and dislikes, the predominance of our selfish or of our benevolent affections, and so on." But the will, to the mind of the metaphysical physiologists is nothing than "the power of self-control,"¶ nothing positive but simply a negation, its effectiveness depending, moreover, on the "constancy with which it is exercised."\*\* And all this elaboration on a topic of an erroneous preconception is called physiology, "mental," as a matter of course, because, without the hybridizing by a graft of metaphysical scholasticism, its spuriousness would be too conspicuous. The attraction, however, of bold construction with "immaterial material" seems so overweening, that the anatomical conscience is dispensed with, and even logics are played at in flighty speculation. According to what formerly used to be English common-sense, what men like Bacon and Shakespeare, Newton and Locke, Hume and Milton, set down as such, there is no accomplished will without a motive. But the new mongrel branch of medical science "Mental Physiology," as represented by Professor Carpenter, knows of motives which are strong enough "to take the place of volition,"†† a process the mysteriousness of which is not rendered more accessible by the information, that it is "the intentional direction of the will" on which depends the character of the motives,‡‡ and that it is by the will that the motives are selected.§§

\* Cf. Carpenter p. 287.

† L. c. p. 271.

\*\* Carpenter, l. c., p. 306.

‡ Ibid., p. 430-431.

† L. c. p. 223.

‡ L. c. p. 101.

†† L. c., p. 336.

‡ L. c. p. 275.

¶ Carpenter l. c. p. 124.

‡‡ Ibid., p. 414.



According to common sense, not only the English one, but that of all countries, there is nothing more common in man, than to have a will, and commoner in woman still. But the metaphysical physiologists teach, that man, in order to will, has need of a particular effort, and that it is "a lower development of volitional power, by which the sex is ordinarily characterized." \* Again "Mental Physiology" does not claim that all the time. It is not in the habit of the metaphysical physiologists to be as consistent as that. Probably, for varieties sake, and to please the public which is apt to mistake inconsistency for versatility, they like to change, and in the mental hybridizing of physiology there are passages enough which diametrically contradict the above assertions, *e. g.* the instance of the Poacher in the Caxtons in whom the will for his sport came so easily that none else could be put at its place.†

As long as there is in the world a record of brawls and combats, of wars and commotions; as long as there ever was heard of lawsuits, in which the defendant and the plaintiff, either, made something different out of the right, which for both, the case being one, never could differ in the judgment; as long as in matrimonial transactions the point at issue was ever contradictory in the old and in the young, and as long as in prose and poetry, in novels and comedies, fables and tragedies, the clashing of motives formed the subject of mirthful or afflicting representations, of cheering or pitiful pictures, it was a CONFLICT OF THE WILL which was at the bottom of the occurrence, either real, or proceeded to by fiction. But "Mental Physiology" ignores such a popular institution as a conflict of the will. With the metaphysical physiologists, the will, if there be any, is unique in its epiphany. Not only that its faculty is merely negative, or in less erudite language, that all the willing the will ever does, is to will itself to pieces, or, as it were, to get hold of its own wig, and twist itself back into the chaos of its non-existence, it is in its psychological appearance perfectly solitary, its scientific admissibility being conditioned by the entirety of a consciousness about itself. Carpenter, speaking of Mozart, cites approvingly the report of Holmes, who tells of an orchestra, whose members, when executing the first time one of his compositions "were awakened by the magic touch of genius to a new life in their art; they found themselves discoursing in an unheard and rapturous language; and the effect upon them was one of intoxication and enchantment."‡ But of this same man, whose composition electrified a whole orchestra, Carpenter speaks as of one "whose will was weak in proportion to the automatic activity of the mind."§ Because Mozart had a strong liking for pretty girls and good champagne, our hybrid science,

whose English common sense is too homespun for "the refinements of German metaphysics," sets him down as of a weak will.

As long as there ever were writers on psychology, no matter of what nation, and irrespective of the special intent of the investigation, juridical or erratic, political or pragmatic, poetical or didactic, medicinal or dramatic, it was unexceptionally out of question, that the will, the hotter it was, came all the closer up with passion. But the metaphysical physiologists of our century of intricate improvements turned the time-honored opinions upside down, and do not acknowledge any will except where there is perfectly self-possessed calculation. Not that any reason be given for such an innovation, let alone a scientific one, but simply by virtue of the enhancement of a wrong, preconceived starting point.

Fortunately for psychology, there are some, among those, even, who habitually compromise with the mongrel branch of medical science, "Mental Physiology," who condemn entirely this intellectual nativity of the will. Says Ribot: \* "The sentiments, emotions, passions have their source in the vegetative life. All that which comes from the heart, the vessels, the digestive, respiratory, sexual organs, in one word from all the viscera, is the raw material of our sensibility, likewise as all that comes from the outward senses is the raw material of our intelligence; and in the same way as, physiologically, the vegetative part of our life precedes the animal part, which is based on it, there is psychologically precedence of the affective life to the intellectual life which is based upon it. The condition of things designed by the names of needs, appetite, cravings, inclinations, tendencies, desires, are the direct and immediate results of the organization of every animal. They make out the veritable foundation of affective life. We must say with Spinoza: 'The appetite is the very essence of man. . . . The desire is the appetite with consciousness of itself. . . .' It follows from all this, that what is at the bottom of an effort, our will, appetite, desire, is not a judgment of anything being a good thing, but on the contrary, our judgment, that a thing is good, is determined by our effort, our will, appetite, desire."† This exposition of Ribot most splendidly shows the true state of affairs, and the cited remarks of Spinoza, this most true-hearted among the metaphysicists of the reformation period, is, without any anatomical corroboration, the very theory which I propound, confirming it by strictly homologous morphological evidence. Ribot not unfrequently connives with the illogical constructions of "Mental Physiology." But passages like the above, where with giant-strides the rays of the lucidity of veritable genius break through the motley garments of loose lexicographical outfit, make good all the occasional con-

\* Carpenter, l. c., p. 153.  
† Carpenter, l. c., p. 238.

‡ *Ibid.*, p. 385.  
§ *Ibid.*, p. 271.

\* *Psychologie de l'attention.*

† *L. c.*, p. 166.

traditions, into which his submission to the "refinements of German metaphysics," as Carpenter calls it, or, to the traditional scholastic humbug, as it ought to be called, allures him.

There is in "Mental Physiology" one certainty about the will. This is the uncertainty of its will what to do with the will. Carpenter makes the statement, that if the will wills without any trouble to itself, then the ensuing action is *voluntary*; but that, if the will has to make an effort to exhibit itself, then the ensuing action is *volitional*;\* and the running out of the brain-twisting by the metaphysical physiologists into the absurdity of such a lexicographical nicety, which even linguistically is without an argument in its favor, is sufficient evidence, that their mentalizing of physiology is not a new method of establishing psychology upon the basis of common-sense, with anatomy at the bottom-end, but only a new method of breaking the Queen's English.

In all the cases, where "Mental Physiology," in its will to demonstrate the will, is at variance with its will, this is owing to the circumstance, that its understanding of the will got corrupted by the preconceived idea, that the will of man is a true one only in as much as it is the resultant of deliberation. "Mental Physiology" made a great mistake; the hybrid science, in starting from these premises, never gave itself the trouble to analyze the intellectual act of a deliberation. If the metaphysical physiologists had used the precaution to do it, they would have found, that man, in deliberating his will, does not, as the point at issue, discuss within himself the question whether he will have a will at all, but only in what direction it is, in the particular case, that he wants to exhibit his will. If man were to deliberate his will as such, the time spent on the weighing of this question would be a dead loss. Any physiologically finished individual would be practically surely behind time with his psychological case. If there were such a thing as deliberation of the will by the man who has it, the only forum where the raising of such a question would have been at its right place, would have been his mother. A person who wants to see about his will, before having it, must, before being born, prevail upon his mother to take council; she must consult him in the question whom to pick out for his father. But, this point once settled, if there be any consequences at all, a person involved in the issue, as a rule, has mighty little chance to come back on it, and acts a great deal more wisely by taking things as they are, than by deliberating the will of willing contrary to its own constitution.†

It is not only by neglect that "Mental Physiology" slights anatomy. It argues in spite of

the inferences that must be drawn from it. Carpenter calls it a strong will when an effort is made to suppress sleep.\* But he would beat about sorely in being given the problem, physiologically, to analyze this effort, and substantiate anatomically the will which makes it, provided, in doing so, he remain in keeping with his theory. It is notorious that it is the cerebro-spinal nervous system in which most imperiously sleep manifests itself first, and accordingly the right explanation of the process in question would be a *reductio ad absurdum* with regard to the definition of "volition or will as a determinate effort to carry out a purpose previously conceived."† For, the cerebrum being the anatomical structure which is called into play by a conception, if this be previous to the exhibition of the will, as an effort to carry it out, it follows with logical necessity that a coercion of the brains to not indulge in sleep can never emanate from the will, wherever its anatomical corollaries may be located. But "Mental Physiology" in its metaphysical flight does not stop at such common-place questions as anatomical corollaries.

The source of the error by which the misrepresentations by the hybridizing physiologists were induced, is altogether in the onesidedness with which they look at the intellectual side of the question. Because the will, in order to have an object, has to become conscious in the understanding, and the active motion of the soul has to get its passive complement in the intellect, "Mental Physiology," not seeing anything but this accomplishing finish, mistook the secondary function of the intellect for the whole process, and established the axiom that our will is the outcome of deliberation and reflection. And accordingly, while, as long as the world has a history, poets have sung and metaphysicians have philosophized, it has been thought and taught and said that a task is made easy, if there is much will to do it, the new mongrel branch of psychical medicine teaches, that there is a strong will only in proportion to the lack of congeniality of labor.‡ According to "Mental Physiology" attention is fixed by a "powerful attraction." But in this powerful attraction there goes for nothing the will of the individual whose attention is attracted. It is only in cases of lack of interest that his will comes at all into play.

The absurdity of this standpoint is so enormous that it would be difficult to conceive how the metaphysical physiologists could alight on it, were it not for the makeshift *automaton*, which in Greek complaisance comes in, ever when the Saxon wit gives out.

Philosophizing with anatomical vouchers, it is clear enough that the will as such, its positive root, is in the blood; it is in the ventral cavity

\* L. c., p. 19.

† "Quelle mésintelligence entre l'esprit et le coeur! Le philosophe vit mal avec tous ses préceptes: et le politique rempli de vues et de réflexions ne sait pas se gouverner." La Bruyère, caractères, p. 256.

\* L. c., p. 133.

‡ Carpenter, Principles, p. 132 and p. 360.

† Carpenter, l. c., p. 370.

where it is originated. And if the intellect is called into play for the accomplishment of the will, this is only for the purpose of establishing its relation to the outer world, or to specify it in its particular manifestations. The function of the intellect, with regard to the will, is, to give it a direction, specialize its general motion. The function of the intellect at all is to objectize the world, and the function it has with regard to the will does not differ in anything from its function generally. The idea, to be sure, that the will, by the intellect, is first called into existence, is an utter absurdity, because it would surmise the will as something which is given a direction without being there previously at all.

The function of the intellect, to begin with, has nothing at all in common with the will. The intellect is a faculty of form, and as far as its essentiality is concerned the will is not born in the dorsal, but in the ventral cavity. The function of the intellect is to objectize the world, and it is only by virtue of this function that it presents to the will motives of action, rules to go by, and principles to follow, for these latter are nothing than the objectizing of the world carried to its ulterior consequences. The true state of affairs is, therefore, precisely the reverse of what our hybridizing physiologists teach. The objectizing of the world by the intellect, so far from calling the will into existence, is PERFORMED UNDER THE INFLUENCE OF THE WILL. The embryological priority of the ventral cavity, by psychology, is fully sustained. The peculiarities of our soul, emotions, passions, the whole character, the will to begin with, could not be experienced without admitting, as our starting-point in metaphysics, the priority of the will to the intellect, and in "Mental Physiology," even, this can be read between the lines, the contrary coming out only as the result of a capriciously forcible misconstruction.\*

There is a circumstance which to the beginner in psychologically medical studies renders the mistake easy which is indulged in wholesale by "Mental Physiology." This is the projection of our entire organic self into the head. It is the projecting fibres of the subcortical centres where the psychical condition of man is metaphysically made present, and for reason of this arrangement in our self-consciousness the error is readily induced, as though in the sensorium itself be imbedded the faculty of feelings, passions, emotions, in short, of all the positive utterances of ourselves which bear upon the will or are this themselves; it is insignificant which symbol we set for the more general, which for the more special manifestation of this our positive being, as long as we do not confound, in our philosophizing, the characteristic parts of man, but distinguish his generative faculties, or what is usually termed

his soul, from his receptive faculties or his intellect, primary understanding and reflecting reason.

On the other hand, it is precisely this never failing presence of our inner man in the cerebrum, which explains the influence of our will over the intellect, in the function of the latter to objectize the world. If the intellect, in the discharge of this its function, were undisturbed by such influence, its faculty to discern would appear in a much more favorable light; left to itself, the intellect would never be biased, for in the intellect as such, in its innate propensities, there is absolutely no interest but that of discernment. All positive influence comes from below, modified, without any doubt, by its copulation with the intellect, but as to its substantiation altogether independent of the latter.

"Mental Physiology," in its metaphysical pursuits, neglects that by which pure genuine physiology has accomplished its great achievements, viz. analysis. If we analyze the function of the intellect, of presenting motives to the will, we find invariably, that it is a weakening influence over the will, which by the intellect is exhibited. There is no more determinate will but one which knows of no more than one motive of action. A hungry tiger, with the object of prey before him, has only one object of action, and can hardly be surpassed as illustration of a determinate will, all the automaton-theory of "Mental Physiology" notwithstanding. A *roué blasé*, who not for hunger, but mere desire of gustatory gratification walks to a fashionable caterer of gastronomical dainties, and sits leisurely down to study the two feet and a half long bill of fare, has many more objects of action than only one, as many almost, indeed, as there are delicacies on the list of the caterer, and such a *gourmet* may fitly pose as a prototype of indecision, want of will from superabundance of motives. It is the latter which keep him vacillating, and might keep him from resolving himself at all,\* were it not for the *ennui* which causes him his own indecision, and which acts as a motive, to slight the motives of action which prevent him from coming to a conclusion.

Carpenter, in his "Principles of Mental Physiology," speaks of a "steady" will, † a "moral" will, ‡ a "rational" will, § an "intelligent" will, || as distinguished from will generally. But he is so overweeningly wrapt up in his prejudice of the precedence of thought to volition, that he states absence of will, or weakness, where it is not rationality or morality which guides the will. He says of Coleridge, that in a conversation he did not suffer any "interruption, however reverent." ¶ He blames Mozart because of not having been so dignified as a Bishop of the English High Church, or a professor of the University of Lon-

\* "Intra duo cibi, distanti e moventi  
D'un modo, prima al morria di fame,  
Che lloer ubmo l'un recasse a'denti." (Danti.)

† L. c., p. 276. ‡ L. c., p. 657. § P. 323. || P. 246. ¶ L. c., p. 309.

\* Comp. Carpenter, Principles, p. 481-482.



don, and thinks himself from these traits of character justified to set both men down as weak in will. Granted that an analysis of character of both, Mozart and Coleridge, would lead to the inference of a deficiency of energy, in either of them, it is for that not the less true, that, in as far as the points are concerned, which Carpenter mentions, the balance would turn the other way. Or is there no will in a man, if his will is not a moral one? Is it no will which the tiger has, that bounds with formidable voracity on his prey? In that case the will to eat ought to be liveliest in our dyspeptics, the will to walk most violent in the men stricken with locomotor ataxia. But why then the distinction which "Mental Physiology" makes of an intelligent, a rational will, from a stupid, an irrational one?

The philosophers of inebriety follow in the wake of the hybrid science. They deny in the drunkard a will to drink. Being attracted by the sight or smell of alcohol, or only tickled subjectively by the remembrance of the irritant sensation, the philosophers of inebriety conclude from the irresistibility of this attraction, that it "overpowers the will," so that the indulgence of the inebriate in his passion is accomplished without a will. How this process is thought to be brought about, which are the positive forces or faculties that come into play, how the functions are divided, the philosophers of inebriety do not say. They follow the example set by "Mental Physiology," to slight in their metaphysical excursions anatomy. The theory of the hybrid science serving their purpose of forensic compassion, they sacrifice systematic psychology, and bring their reasoning into opposition to thousands of years of practical observation.

The old Romans made a very sensible distinction between *voluntas* and *veleitias*. The like practical psychology is ignored by "Mental Physiology" and all who are guided by its contradictory theories. Because the inebriate has the *veleitias* to be a sober man, before the deciding moment has come, they think when this arrives his *voluntas* is a—well, this is precisely what they don't tell. They call it *automaton*. A temperance-preacher would call it the devil. Really, it is the will in the ventral cavity.

It is not only the inebriate who illustrates this order of things. The jealous,\* the erotic,† the choleric‡ afford as striking examples.

\* Cf. Shakespeare.

*Desdemona*: Alas, the day! I never gave him cause.

*Emilia*: But jealous souls will not be answered so;

They are not over-jealous for the cause,

But jealous for they are jealous: 'tis a monster

Begot upon itself, born in itself. (*Othello*, III., 4.)

† *Id.* *Antony*: Egypt thou knew'st too well,

My heart was to thy rudder tied by the strings,

And thou should'st tow me after: O'er my spirit

Thy full supremacy knew'st; and that

Thy beck might from the bidding of the gods

Command me. (*Antony and Cleopatra*, III., 9.)

‡ *Id.* *Countess*: . . . I beseech your majesty to make it

And homologous, morphological evidence confirms this. "If the heart of an animal which is beating regularly when the chest is opened be made to beat slowly by stimulation of its vagus nerve, it will go on beating for a long time; but if its beats are quickened by irritation of its sympathetic nerve, it soon comes to a standstill from exhaustion."\* This shows where the fountains of life lie. Similarly, says Mills,† "the inhibitory fibres can arrest, slow or weaken the cardiac beat; the sympathetic accelerate it or augment its force." Hence the inference of the positive and the negative sides of the question, confirming anatomo-physiologically our psychological demonstration.

## CLINIQUE.

### ANTIPYRINE IN CHOREA.

BY J. HENRY CLARK, M. D., NEWARK, N. J.

THE following case having recently occurred in my practice, and presenting such interesting and I may add instructive features, that I have thought it perhaps worthy of brief mention. A girl of eleven (11) years was brought to my office by her family with the complaint of general restlessness, and being abnormally irritable and peevish, and also that she talked in a jerky manner. The symptoms complained of had manifested themselves only during the past twenty-four hours. I pronounced the case one of chorea, gave directions for the care of the general health, and ordered Fowler's solution, beginning with m. iij. increasing m. j. daily. The child was brought to me the following day. The disease had advanced rapidly, speech and locomotion were beginning to be effected. I continued the same treatment. The next day being the third (3d) day I saw the child at her home, no improvement whatever was found. The fifth day I again visited the child and found all the symptoms greatly aggravated—causing, naturally, great alarm on the part of the parents. I increased the arsenic to m. viij. giving proper attention to diet, bathing, rest and ventilation. On making my visit on the sixth day I found that the disease was fully developed, had reached about its greatest severity. All the voluntary muscles were in constant movement. The speech so effected that the child's utterances could not be understood. Locomotion so effected that she could not even remain on her feet. The usual characteristic contortions of the features were present to a marked extent. The mental condition appeared to be effected as manifested by

Natural rebellion, done I the blaze of youth;  
When oil and fire, too strong for reason's force  
O'erbears it, and burns on. (*All's well that ends well*, v., 3.)

\* Henry Maudsley, the Pathology of Mind, p. 1, (3d ed.).

† Wesley Mills, a text-book of animal physiology, p. 288.

the almost idiotic appearance of the expression. The patient did not sleep, and would not allow any one else in the house to sleep. The violent movements and contortions threatened to exhaust the child. I felt the necessity of adopting some course of treatment that would meet with prompt and beneficial response—so after careful deliberation I decided to stop the arsenic and to give antipyrine, which I did, by ordering 3 j. to be divided into four powders, and one powder to be given every four hours until I again called. This was at noon of the sixth day. I did not call again until noon of the seventh day, next day, having left word, however, that I should be called if any thing unusual occurred. I found on calling a most gratifying change in the patient's condition. She had taken the four powders, had slept quite well, movements were very much lessened both in severity and frequency. I ordered the same treatment repeated for the next twenty-four hours, and visited the case at midnight to watch the action of the drug on the system, but I found the child sleeping quietly. The next, the eighth day, at noon, the improvement in the patient was something remarkable and very gratifying to all interested. All violent movements had entirely ceased. The patient's mental condition was normal, could walk, eat and talk with very little or no difficulty. I ordered gr. x. of antipyrine to be given three times a day, saw the child next day (ninth day), found her still further improved—ordered gr. x. to be given A. M. and P. M., and on the next, the tenth day, the only evidence of the disease manifested was a little unsteadiness in conveying a glass of water to the mouth.

I had given up to this point 170 grains of antipyrine in four days. I changed the treatment—omitted all medicine for twenty-four hours—then renewed the arsenic (m iv) combined with the bitter wine of iron (3 j.). The twelfth day all evidence of the disease had disappeared. I continued to watch the case daily for another week, but the patient seemed to continue to improve. She was allowed to go out of doors, ride and take moderate exercises.

Six weeks have elapsed. I have kept the patient under observation. The child's condition appears to be perfectly normal, and gave every evidence of being in excellent health.

The features in the case of special interest to me were in the predisposing cause, the apparently sudden outbreak, the rapid development of the symptoms, the severity reached, the duration, and the rapid decline. The child's previous health had been quite good. The family history is good on the father's side, poor on the mother's, who is constantly suffering from nervous affections, and whose general health is poor.

I have thought that perhaps the attack might have been produced on by reflex-irritation from

some nerve-injury forgotten at the time, as the child is accustomed to play at will in the street.

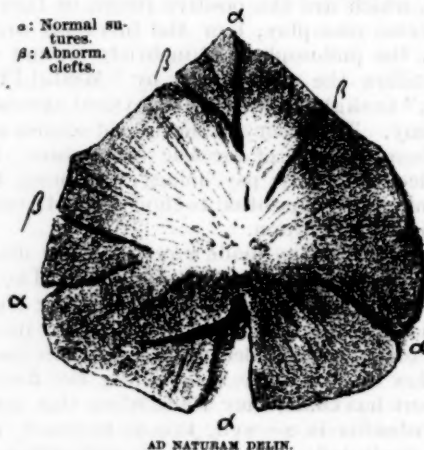
Antipyrine, when first introduced to the profession, was presented to us as a new antipyretic, and its strong affinity for the nervous system was unobserved, I think. This feature has been developed since the drug has been more extensively used. I fear I was somewhat venturesome in the use of the drug in this case as regards the quantity used, but I was prompted by the gratifying results obtained. Several have reported a number of cases of chorea in children in which antipyrine and antifebrine have been used with generally good results, and in some cases remarkable results have been obtained I believe.

#### A PLAUSIBLE SUGGESTION TO THE FORCEPS AS A CAUSE OF IDIOCY.

BY FRANK A. ROCKWORTH, M.D., SAGINAW, MICH.

PERMIT me to present herewith a careful anatomical drawing of a preparation of a foetal *os occipitale* in my possession.

The child was delivered by the forceps in the



thirty-fourth week of gestation, and lived to the third day. Its weight at death was 7lb. 3oz. (less clothes).

The question which it presents is, I confess, rather vague, yet not out of place, when reflecting upon a certain article in the "Gleanings" column of the February number of this journal.

Of course, we all know there are normal clefts in this bone at such an age (and often later even). These are marked, therefore, alpha; while those leaving room for the theory of hard usage during delivery are marked beta.

All that remains to be proved, and of which only very experienced anatomists are competent to speak, is that, whether these ruptures are due to traumatic interference or whether they are the

result of imperfect ossification, the same as in the case of those marked alpha.

While I know of only one case out of an experience of thirty years of practice to which the theory of Messrs. Winkler and Bollaen might be applicable, I thought that the unusual conditions in this occipital specimen as coincidental with the forceps delivery, might find therein also a plausible explanation.

#### ARGENTUM NITRICUM vs. DREAMS OF SNAKES!

By H. R. STILES, A.M., M.D., HILL VIEW,  
LAKE GEORGE, NEW YORK.

I WAS lately consulted by a young lady concerning "horrid dreams," or, rather, the repetition for several successive nights of the same dream—viz., that of a large snake, which seemed to attach itself to the victim, and which she could not avoid or tear away from its hold—and from which dream she always awoke in a tremor, etc. Her physical health and mental condition were perfectly normal; nor was there any irritation of the anus or genitalia, nor any suggestive associations (such as reading or hearing of snakes) which should have caused such dreams. Being thus obliged to prescribe for the symptom alone, and bethinking myself of a case of mania, of some weeks' standing, which had been superinduced by excessive drinking, and the principal hallucinations of which were connected with snakes, which we once had at the Middletown Asylum, I prescribed for this young lady *argentum nitricum*, 3d trituration—two or three doses for a single day—and that was the last of the snakes! This is the third or fourth case in my experience where this drug has promptly met this symptom.

#### AT THE CLINIC OF PROF. CHARCOT.\* [HOSPICE DE LA SALPETRIÈRE.]

**Sclerose en Plaques of Long Duration without Embarrassment of Speech.**—October 29th, there presented himself at the out-patient department a man whose clinical history may be given as follows: In 1871 this man was taken with pains, which were followed by *rigidity* of the right leg. His walk was rendered somewhat difficult, and he went limping about. In 1876, after three or four years of considerable improvement, he noticed a peculiar sensation while walking, it feeling as though he were walking upon cotton; then he had difficulty in walking from the *rigidity in both legs*. The cautery was applied, which caused his lower extremities to improve. He had poor compensation; there was inco-ordination of the arms, they were awkward and would let anything fall which they might contain. In 1878 the *rigidity* of the legs was accompanied by *trembling* of the head and hands with a slight embarrassment of speech, which, however, was of short duration.

After this alternating period of getting better and then still worse again, during which time the legs were so stiff that walking was impossible, eye-symptoms, diplopia, appeared.

\* Translated from the *Gazette hebdom. de Médecine et de Chirurgie*, No. 47, 1889, by Albert Pick and F. H. Pritchard, M.D., of Boston, Mass.

Now, to-day one can observe a manifest inco-ordination of the intentional movements. For example, the patient can not carry a glass of water to his mouth, walking is painful to him on account of the rigidity of his legs; his reflexes are absent. His look is remarkable—it is indefinite, unfixed, dull and devoid of expression. He complains of formication and slight, lightning-like pains in his legs. In short, this patient presents us a fine example of *sclerose en plaques*, and he only lacks the characteristic embarrassment of speech to complete the picture. This absence of one of the great characteristics should be noted. It is also worthy of remark that in this patient the affection has presented itself in a form—contracture of the hands, rigidity of the legs, etc.—which M. Vulpian observed over twenty years ago.

*Sclerose en plaques*, of all the spasmodic paraplegias, is the most liable to present one extreme or the other. This patient has never had any acute diseases, and hence the view of M. Charcot is justified when he refuses to see in *sclerose en plaques* a disease due to micro-organisms.

**Tabes Dorsalis, Gastric and Laryngeal Crises.**—A patient, forty-six years of age, experienced for eight years lancinating pains in the legs; the inco-ordination was not very marked nor the pains troublesome which left the visceral troubles in the foreground.

The interesting feature in this case is the singular regularity or periodicity in the return of the crises. This periodicity is far from being rare in tabetic patients; one often observes it as a sort of reunion of the tabetic symptoms, or the visceral trouble may occupy nearly the entire scene of action. As soon as the crises have commenced, they then continue for several days without weakening or diminishing. There is then about thirty minutes between each period of vomiting.

The last crisis dates from five weeks ago; morphine seems to calm the gastric crises; the laryngeal crises are less violent than the gastric, but they also are less regular. The symptoms which, with the lightning-like pains, are characteristic and diagnostic, are—the inequality of the pupils, the sign of Argyll-Robertson, and the absence of the patellar reflex.

**Migraine and Blepharoptosis.**—The history of the migraine is one which is far from being understood and elucidated. A patient, sixteen and a half years of age, has been a sufferer from migraine since her sixth year. This migraine had finally, after some irregularities, settled down to appearing periodically every three months. It was characterized by pains in the forehead, and, what is curious, every crisis was accompanied by a ptosis of the right eyelid. Once the pains passed over in the form of gastric symptoms; the ptosis recovered of itself.

After the last crisis it was otherwise; the eyelid fell when the pains appeared, but it was not relieved by their passing away.

M. Charcot cited a similar case in a woman who, suffering a long time from migraine, observed the pains to suddenly diminish in intensity while a blepharoptosis appeared which resisted every method of treatment.

**Antiseptic Properties of Corrosive Sublimate in Minimal Quantities.**—Dr. Francois Scalji has recently been experimenting with very weak solutions of the sublimate, and has found that when used at a temperature of 115° to 125° F., solutions of a strength of 1-10,000, 1-20,000, and even 1-50,000 and 1-100,000 are capable of exerting germicidal actions equal to those of solutions of 1-1,000 or 1-5,000 at a lower temperature.

The clinical value of these experiments (remarks the *Med. and Surg. Reporter*) is very evident, for if satisfactory antiseptic results are obtainable with a 1-100,000 solution of corrosive sublimate, neither surgeon nor obstetrician need be circumspect regarding its free use. The irritant or caustic action of the stronger solutions will be absent, and the danger of poisoning through absorption entirely removed.



## A HYSTERECTOMY SCREW.

BY H. I. OSTROM, M.D., NEW YORK.

TO Mr. Lawson Tait's readiness to adapt any mechanical appliance to the requirements of surgery, we owe the use of the cork-screw for lifting solid tumors out of the abdomen. But the ring handle of the instrument designed by him, has always seemed to me rather clumsy, especially so when the screw is being inserted. I have therefore had a screw with a straight handle made for



me by Tieman & Co. The instrument is welded from a single piece of steel, thus securing strength and guarding against separation of handle and shank.

In some cases of soft oedematous myomata not firm enough to bear the strain of the screw, I have succeeded in delivering the tumor with a pair of short obstetric forceps. Unless there are adhesions, the blades of the forceps can with ease be carried down over the sides of the tumor, and the whole mass brought out of the abdomen with safety.

42 West 48th Street.

## CLINICAL SIGNIFICANCE OF THE TENDON REFLEXES.

BY PHILIP ZENNER, A.M., M.D.

*Clinical Lecturer on Diseases of the Nervous System, Medical College of Ohio.\**

The tendon reflexes are the sudden contraction of muscles elicited by sharp blows upon their tendons. It is very doubtful whether they are true spinal reflexes, the opinion now most generally held being that the contraction of the muscle is due to its direct irritation. But, nevertheless,

the integrity of the reflex arc (this includes the muscle, its afferent and efferent nerve, and the segment of the spinal cord with which it is related) is necessary for the production of the tendon reaction. This is the important fact, clinically, for as there is anything abnormal in the tendon reaction, so is there something abnormal in some part of the reflex arc.

In normal subjects only a few tendon reflexes are commonly found, those of the patellar tendon, of the achilles tendon, and of the tendon of the triceps muscle, the one by all means the most common being the patellar tendon reflex. In addition to these tendon reflexes, a few others called "deep reflexes" are sometimes found in healthy subjects. Thus tapping on the lower end of the radius causes contraction of the biceps. These deep reflexes, are, probably, of the same nature as the tendon reflexes, and, though not found to any extent in healthy subjects, are greatly multiplied in those cases of disease where the tendon reflexes are much exaggerated.

These phenomena are of significance in disease to the extent that they then appear differently from what they do in normal subjects. These differences are their entire absence, where they are present normally, and their pathological excess. The patellar tendon reflex can almost invariably be elicited in health; its absence is therefore of deep significance. The tendon reflexes vary much in the extent of their manifestation in different healthy individuals—scarcely perceptible in some, seemingly excessive in others. They even vary in the same individual at different times. For these reasons it becomes difficult to define what is pathological excess. But one phenomenon, which will be described further on, may be accepted as a proof of pathological excess, as it is almost never present in healthy individuals, and that is that form of excessive achilles tendon reaction usually termed ankle clonus.

It is these two phenomena, the patellar tendon reflex and the ankle clonus, which are of importance to us as diagnosticians and practitioners. The absence of the first, the presence of the second, belong to the most pathognomonic signs of disease. It is only with these phenomena that we will be concerned in this paper.

## PATELLAR TENDON REFLEX.

The patellar tendon reflex, knee phenomenon or knee jerk, as it has been variously termed, is the sudden contraction of the quadriceps femoris muscle, and consequent forward jerk of the foot when a sharp blow is struck upon the ligamentum patellæ. This phenomenon varies much in degree in different healthy individuals, from a state of apparent excess to one where it is almost imperceptible. Therefore, as its complete absence is so significant, it is important to fully understand the methods of eliciting it, lest it be pronounced absent when merely difficult to elicit.

The ordinary method of eliciting it is to have the patient cross one knee over the other and then strike the patellar tendon with the tips of the fingers, the inner border of the hand, or a percussion hammer. This usually suffices, but in difficult cases it is well to have the patient sit on a table with the legs dangling and the knees entirely bare, and strike the tendon in every part. We must see that the limb is not tightly compressed by the clothing, and that there is no voluntary contraction of the muscles of the knee, that is, the leg must be enabled to swing freely. The tendon must be struck on every part, if the phenomenon is not otherwise obtained, because a blow at one point, inner or outer margin of the tendon or elsewhere, will sometimes produce the reaction when it will not do so struck upon any other part.

If we have not yet succeeded in eliciting the phenomenon, we must try Jendrassik's method. The patient is told to clench his hands and then pull them forcibly, and while his muscles are thus vigorously in action the examiner strikes the ligamentum patellæ. This method increases

\* Abridged from the *Cincinnati Lancet-Clinic*, November 16, 1890.

the phenomenon very much. If no response can be obtained with its aid, the patellar tendon reflex may be pronounced to be absent.

When the patient is confined to his bed the knee may be held at an obtuse angle by the hand of the examiner, and then the blow delivered on the ligamentum patellæ. It is often a good plan in doubtful cases to place the hand on the quadriceps muscle, for its contraction may be felt when no distinct movement of the foot is observed.

I lay special stress on the methods of examination, because I have very frequently had cases pointed out to me by other physicians as instances of absent knee jerk when a proper examination very easily elicited it.

The fact that this phenomenon is almost always present in health and that its absence is a sign of disease is easily demonstrated by a few figures. Pelizeus examined 2,403 school children, and, though the phenomenon was difficult to elicit in some, succeeded in obtaining it in every one of them. Jendrassik examined 1,000 persons, chiefly adults, some healthy, others not, but with no manifest disease of the nervous system, and only failed to elicit the phenomenon in a single individual, that being a case of diabetes mellitus. In a paper read before the American Medical Association in 1886 I made a report of the examination of 2,846 adults, of whom 1,174 were insane. Of the latter I shall speak again. Of the 1,672 sane persons the knee phenomenon was found absent in five. Of these, two were cases of locomotor ataxia, one was an old man of ninety-four years, and two were in apparent health.

Such figures suggest the question: Is the absence of the knee phenomenon always a sign of disease? Our experience hitherto does not warrant an answer in the affirmative. It seems that, in very rare instances, the phenomenon is absent in altogether healthy individuals; though cases of this kind should be kept under observation to watch whether other symptoms of disease will become manifest. But when other, even slight, symptoms are present, the absence of the knee phenomenon has an almost pathognomonic significance.

The patellar tendon reflex is absent when there is disease involving any part of its reflex arc, the muscle, its afferent or efferent nerves, or the appropriate segment of the spinal cord. This includes disease of the anterior crural nerve, and its anterior and posterior roots, neuritis, tumor, injury or the like, and such disease of the lumbar region of the cord as destroys nerve cells and fibres relating to the quadriceps femoris muscle.

In recent years the phenomenon has been often found absent in cases of diabetes mellitus, chronic alcoholism, and diphtheritic paralysis, and is probably due to a degree of neuritis existing in these cases. The same cause probably accounts for its absence in some cases of paralysis from arsenic and other toxic agents.

In these instances the absence of the knee jerk is an interesting clinical feature, but it is not of much importance to the practitioner. But it is quite different as regards the diseases of the spinal cord. The diseases of the cord in which this phenomenon is generally absent are anterior poliomyelitis and locomotor ataxia.

It is always absent in anterior poliomyelitis when it affects the lumbar region to any extent. This sign is especially valuable in the diagnosis of the early stages of the essential paralysis of young children, for in such cases the quadriceps femoris muscle, on one or both sides, is frequently affected. It is often difficult to determine why an infant does not move its limbs, whether it is due to pain or loss of power. When the paralysis has been present for some time, the atrophy of the limbs and the altered electrical reactions plainly reveal the true condition; but the loss of the patellar tendon reflex may do so almost at the beginning of the disease. On the other hand, the presence of this phenomenon may help to exclude the disease.

But the disease for whose diagnosis the absence of the knee jerk is especially important is locomotor ataxia. This symptom is so valuable here because it is almost always present, and usually an early symptom, often the first symptom. So almost universally is this symptom found in locomotor ataxia that the disease may often be excluded if the knee phenomenon is normally present. This possibility of excluding a grave disease is often of great consequence in practice. . . I might adduce the histories of numerous cases, some of much interest, sent to me by physicians as cases of locomotor ataxia, where I was enabled, chiefly by the condition of the knee phenomenon, to exclude this disease, to the no small relief of the sufferers.

I do not wish to promulgate the idea that the knee phenomenon is always absent in locomotor ataxia, for it is sometimes present, especially in the early stages of the disease. But, nevertheless, its presence is so rare, at least without some modifications which may be considered pathological, that when the phenomenon is found normally present this disease may be safely excluded unless other strong evidence is manifested in its favor.

So much as to the value of the knee phenomenon in excluding locomotor ataxia. On the other hand the absence of the phenomenon is often conclusive evidence of the presence of this disease; in fact, it may enable us to make a positive diagnosis of locomotor ataxia, when, before finding this symptom, the disease had not been thought of.

If this symptom is alone present one would scarcely venture to diagnose diseases of the cord, for it is sometimes found in apparently healthy individuals; but if other symptoms of the cord are found, such a diagnosis should be made.

Other early symptoms of locomotor ataxia are shooting pains and certain ocular symptoms, transitory or permanent paralysis of extrinsic muscles of the eyes, atrophy of the optic nerves, and spinal myosis—that is, very small pupils which do not respond to light, but become narrower in the act of accommodation. If any of these symptoms are present and the knee phenomena are missing, locomotor ataxia should be diagnosed. I have in a number of instances made the diagnosis when only two such symptoms were found, and have seen other symptoms of the disease become manifest at a later period.

I wish, next, to call attention to the importance of the absence of the patellar tendon reflex in the diagnosis of one of the forms of insanity, general paralysis of the insane. In many cases of this disease there is sclerosis of the posterior columns, without its striking symptoms being manifest, but in which the absence of the knee jerk and spinal myosis can be found when sought for. Of the 1,174 insane patients reported in my paper, to which I have briefly referred, in twenty-three the knee jerk was absent. Of these, twelve were cases of general paralysis. The significance of this will appear greater when it is remembered that there were few other cases of general paralysis in the number examined. Of these twelve cases of general paralysis with absent knee phenomena, pupil symptoms were found in ten, while of the other eleven insane with absent knee jerk, pupil symptoms were found in but two. We may conclude from these observations, which are, furthermore, corroborated by those of other physicians, that when an insane patient has absent knee phenomena, and spinal myosis, there is a strong probability that he suffers with general paralysis. . . .

I have, so far, spoken of the significance of the absence of the patella tendon reflex; but we must also consider another question: Does a very slight response have any clinical significance? Generally such a response has no significance, for it is found in many healthy individuals. The variability of the response is dependent largely on the degree of tension of the tendon, the response being slight when the tension is lax. In some individuals a layer of fat under the tendon seems to interfere with the reaction. It

is often difficult to obtain the knee jerk in infants and young children. But under some circumstances a diminished response must be looked upon with suspicion, if not considered a positive sign of disease. This is true when the knee jerk, at one time normal or even excessive, is observed to gradually lessen in degree, or when it is much less on one side than the other, and especially when it is altogether absent on one side. Such manifestations must make us suspect disease of the cord.

#### ANKLE CLONUS.

We have so far considered the significance of absent tendon reflexes; we must now consider the significance of these phenomena when they are excessive. We shall consider only that form of these manifestations which has the greatest clinical significance, the ankle clonus.

The ankle clonus consists of a series of rhythmical up-and-down movements of the foot, at the rate of six to ten per second, produced by its sudden dorsal flexion. To elicit it the foot is grasped firmly with one hand, while the other may support the lifted leg, and then the foot is flexed suddenly and forcibly, and held in the flexed position. The movements of the foot are caused by the contractions and relaxations of the muscles of the calf. The clonus is a series of achilles tendon reflexes. The sudden flexing of the foot stretches the tendon and produces a contraction of the calf muscles, just as a sudden blow on the tendon would cause it; and the series of contractions is caused by a succession of the same causes. The movements continue as long as the foot is held in its flexed position.

The ankle clonus is very rarely met in healthy individuals. Berger examined 1,400 soldiers and succeeded in eliciting it only three times. Like the absence of the patellar tendon reflex, it acquires its significance in disease on account of its rare appearance in health.

The ankle clonus is found mainly in those cases where there is disease of the pyramidal tracts of the cord, in various forms of myelitis, in lateral sclerosis, and in degeneration of the pyramidal tracts secondary to cerebral lesions. But it is not found if there be, at the same time, sclerosis of the posterior columns, or extensive disease of the anterior gray matter in the lumbar portion of the cord.

It is a question to what extent the ankle clonus will assist in differentiating between organic disease of the cord and some cases of hysteria, where loss of power, rigidity of limbs, and excessive tendon reflexes seem to indicate organic disease. Usually the presence of a decided ankle clonus may be accepted as proof of organic disease. While they may be excessive tendon reflexes in hysteria, we seldom, if ever, find the ankle clonus. There may be found a spurious ankle clonus; that is, a few clonus contractions of the calf muscles are obtained when an attempt is made to elicit the ankle clonus, but not the unbroken series of movements of the foot as long as the effort is kept up, which is characteristic of the genuine clonus.

The tendon reflexes are often very pronounced in nervous persons; they are excessive in some cases of ordinary neurasthenia, in hysteria—in fact, wherever there appears to be excessive irritability of the nervous system—in chronic diseases, in convalescence from severe diseases, etc.; but in none of these instances does the excess usually reach to the development of the ankle clonus.

In addition to their significance in diagnosis, excessive tendon reflexes often have great value in prognosis, in assisting us to determine whether a hemiplegia of cerebral origin will be permanent. The earlier and more pronounced these manifestations are, the more unfavorable the prognosis.

**Antifebrin as a Hypnotic for Children.**—A correspondent of the *British Medical Journal* says:

Amongst the many hypnotics which at present are being so liberally supplied by the chemists to the medical profession, it is well not to lose sight of the value of antifebrin in certain groups of cases. Although the drug suggests

more than its action is to hinder the development of a febrile condition, or, when that condition exists, to lower the temperature, still in many cases in my practice it has proved a valuable hypnotic and analgesic.

Its value has been most evident in cases of broncho-pneumonia, croupous-pneumonia, and bronchitis, and that more especially in cases where children have been the sufferers. The marked relief which has frequently followed its administration has in many cases been extremely gratifying. Cases of fretful insomnia of the young, possibly partially caused by pain, fever or general *malaise*, have been speedily relieved by the drug, and from six to eight hours of refreshing sleep have been induced. After sleep the awakening was natural, there being no excitement nor confusion of thought. There was no period of excitement observed before the drug took effect. Along with the onset of sleep there was a fall of temperature, frequently a copious perspiration; at the same time the respiratory acts were slowed and the pulse-rate diminished. In no case have any evil effects been noticed, although the success of the drug induced its employment in a large number of cases.

The need of a safe hypnotic for children, such as antifebrin seems to be, will, I think, be readily appreciated, the number of cases where it is required being unfortunately very large. It is still further enhanced as a serviceable drug for children by the fact that it is comparatively tasteless, and also by the smallness of the dose; the dose being from two to five grains, depending, of course, on the age of the child. A useful way of prescribing it, I have found, is to place the powder on the dorsum of the tongue, either alone or mixed with a little powdered sugar. It might also be given in the form of a mixture—the drug being insoluble in a watery menstruum—suspended by the aid of mucilage and sweetened by any of the various flavoring syrups. There is yet another important advantage in hospital and general practice over many recently introduced hypnotics, in the comparative cheapness of the drug.

**The Phonograph as a Universal Acoumeter.**—According to the *Deutsche Medizinisch-Zeitung* (N. Y. Med. Jour.) Lichtwitz maintains that Edison's phonograph fills the requirements for an acoumeter. It is possible, he asserts, to arrange phonogrammes by means of which the hearing can be accurately measured. The phonograph can reproduce every sound and tone perceptible to the normal ear, including the inflections of the voice; it repeats the sound without noticeable change, so that the acuteness of the hearing of different patients, and of the same patient at different times, can be accurately compared; it will reproduce with the same intensity and quality of sound the uniform phonogram, so that aural surgeons of all lands can compare their observations.

The operation of the apparatus is simple. The ear-piece is applied to the ear which is to be tested, and a phonogramme which is audible to the patient is sounded. The acoumetric scale is then descended until a phonogramme is reached which can not be heard. This marks the limit of hearing for that ear. In this manner the source of sound remains always at the same distance from the ear, and only the intensity of the tone differs. If the phonograph will do all that Lichtwitz alleges, and if it is practicable to create such a series of fixed phonogrammes as he suggests—and we do not now see why such a plan may not be feasible—we may look forward to a great improvement on the now rather crude means of testing the hearing. All of the methods at present employed for this purpose are objectionable in that they do not furnish a fixed volume of sound in every case. The tone and intensity of the "tick" of various watches differ, and sometimes they vary even in the same watch. Still more unreliable for purposes of comparison is the human voice, but the plan suggested is intended to furnish the same tone and intensity of sound in each case, and so to render observations more exact and permit of comparisons of observations in a manner not at present possible.



# The New York Medical Times.

A MONTHLY JOURNAL

OF

MEDICINE, SURGERY, AND COLLATERAL SCIENCES.

EDITORS:

EGBERT GUERNSEY, M.D.

ALFRED K. HILLS, M.D.

Business Communications should be addressed, "Publishers, 526 Fifth Ave.," and Checks, etc., made payable to THE NEW YORK MEDICAL TIMES.

Published on the First of each month.

OFFICE, 526 FIFTH AVENUE, NEW YORK.

Changes of standing advertisements and communications in regard to that department, should be addressed to BENJ. LILLARD, Advertising Manager, 72 William Street, N. Y.

NEW YORK, APRIL, 1890.

## THE DRIFT OF PUBLIC THOUGHT.

AT NO period during the history of the past has the practical results growing from the ceaseless evolution of thought been more apparent than during the past decade. Every year man is realizing more and more that the responsibility for human progress rests on human shoulders, and if that progress falters or stops, the fault is ours alone. The world is a vast battle-ground in which the forces of good are ever contending with those of evil, and it has reached its present condition through ages of conflict. The past of Nature is black with convulsion and struggles, out of which has been evolved step by step a nobler life and a higher humanity. The world has been given us as an inheritance, which we can dispose of as we please. We can work with the laws of Nature or against them. We can barter our inheritance or claim our fortune. In man's own hands lies that God power which must transform Nature, which must lift and redeem it from the heritage of the animal world from which it sprung. As in the process of ages we are evolved further and further from the brute creation the intellect ripens and broadens, gaining at each step of its progress an additional strength and a clearer, purer insight into the eternal principles of justice and truth. We beget our own destiny, and need not accuse Providence of evils which we ourselves have created. The laws of life are their own avengers, and the human race, in one sense, is its own Providence. It decides for itself the question of peace or war,

health or pestilence, plenty or famine. All the propelling and governing powers are in man, and on him rests the burden which in times past was thrown upon Providence.

During the ministry of Lord Palmerston an epidemic of typhoid fever swept over certain districts of England. A delegation of priests visited the minister, asking him to appoint a day of fasting and prayer. Palmerston replied: "Deity is not the providence of the shiftless. The remedy lies in your own hands. Go home and look to your drains." They did so, and the pestilence ceased. Relief came not in the robed priest, the incense floating through aisle and chancel, the anguished prayer, but in the cool, clear, scientific brain which sought out and remedied the cause of the pestilence. For ages men trembled as the thunder rolled through the heavens and the lightning sent its death-dealing bolt to the earth; but when the scientific brain of Franklin drew the electric fluid harmless to the earth with his kite and line, and made this all-powerful agent subservient, to a certain extent, to the will of man, he multiplied ten thousand-fold the powers of labor and opened a limitless avenue for the benefit of the world. Man was intended to rule Nature, and not be crushed by her, and he is taking every year a firmer hold of his inheritance in those practical scientific developments by which he controls more and more the natural forces about him, and makes use of them to correct the ills of life. The hard, remorseless forces of Nature, before whom man seemed at first a mere helpless pawn in the blindfold game of necessity, he finds can be made obedient to his will, and either do his bidding or in a measure be deprived of their power to harm. It has been said that in every vein of our body rages the deadly strife between the corpuscles of life and the bacteria of death, and that in each human body the battle of life is hourly fought anew, but as we learn more and more of the process of life and death, and the illimitable resources of Nature, the death-dealing malaria and parasites slowly disappear, the deserts are fertilized, the climate ameliorated, and all that is detrimental to man slowly recede and pass away. Man co-operates with God and helps on the movement of the creative purpose, atom by atom, as he strives to mend and guide humanity, to mitigate its sorrows, to lessen its woes, to soften its vices, and to strive for its well-being: If our profession could realize this idea even in part, and understand how closely it is linked with all the natural sciences, each contributing its quota to the sum of knowledge to be utilized for the benefit of humanity, it would be able to comprehend in

some slight degree the immense possibilities within its power. The therapeutic action of drugs is so little understood, and forms so small a part of the real work of the physician, that it is rapidly ceasing to exist as an element of antagonism in the profession, but the study of the physiological and pathological effects of drugs upon the healthy organism is from the same standpoint and along the same lines, and the results are utilized according to experience and the best judgment of the individual. The lines of thought, in working out the great problems of human misery and suffering, of life and death, are rapidly converging, and the solution will be reached in the unfolding evolution of ages, not by a single mind but by the thousands of earnest souls whose minds have been purified and sharpened in the process of evolution, as they drank more and more deeply of the harmonies of Nature. The drift of public thought is more and more away from the antagonism of schools and the arbitrary dictates of would-be autocrats, and along those simple lines of work which they can understand, and results which they can see. The clergy and physicians, linked together as they are and should be in the care of the soul and the body, working for the prevention and relief of suffering, the promotion of happiness and universal progress, instead of being leaders of thought, marching on in the forefront of progress, not unfrequently lag behind, clinging to old traditions until the new ideas, bright and sparkling from the crucibles of science, are forced upon them by public opinion, ever on the watch for the new and the practical.

We had almost forgotten that with this April issue commences the eighteenth volume of the *NEW YORK MEDICAL TIMES*. Those who have followed the course of this journal from its commencement, and their number is large, will testify, we think, to the courtesy always shown to the profession, to the entire freedom with which our correspondents have stated their own convictions, and to the absence of offensive personalities in our editorial discussions. We have ever defended what we considered vital principles with all the strength of our convictions, but personal attacks upon the editors we have considered of no interest to our readers and have let them pass unnoticed. Our work speaks for itself. To the host of new friends who are added to the *TIMES* list year by year, many of whom have sent us cordial words of approval and a thorough endorsement of our course as a medical newspaper, we extend our cordial thanks, with the earnest assurance that every effort on our part in the future as in the past will be to give them a journal fully up to the

progress of the profession. Our labors will be materially lightened if our friends will send us the results of their own work either in clinical cases, items of news or original articles.

#### PHENACETINE IN WHOOPING COUGH AND BRONCHITIS.

**I**F THERE is any remedy which will control a disease in a few days, which, if left to run its natural course, would last an average of ten weeks, it may be safely said that in one disease at least science has accomplished something. Who has not felt, as he has seen the victim of whooping cough struggling in its convulsive paroxysms, with its face purple, its eyes bloodshot, and its hands wildly thrown about in agony, the poverty of his art and his science for any relief it could bring to his patient. Scores of remedies have been introduced as specifics, and yet none have been more than partially successful. Possibly the new remedy, phenacetine, may share the fate of its predecessors, and yet we have seen such wonderful results from it in the catarrhal and spasmodic stages of whooping-cough, in the teasing and spasmodic coughs of bronchitis and laryngitis, we are led to hope that in this class of troubles it will yet rival quinine in its own specific field.

In a typical case of whooping-cough in a child eight months old, which had passed through its catarrhal stage and was well on in the second or convulsive stage, the paroxysms coming on every hour of a very violent character, the action of the drug was almost magical. Under the influence of grain and a half doses every three hours, the paroxysms in three or four days were reduced to half a dozen light ones during the twenty-four hours, and in a week had entirely disappeared. Another case was when the attack had not fairly entered the second stage, and yet the exposure of the child and the peculiarity of the symptoms left no doubt as to the character of the disease. In three days the cough had very nearly disappeared under the influence of two grain doses of the drug every four hours, and in a week's time he was able to return to school. In the school-mate from whom the disease was contracted, the disease was two months in running its course. In both of these cases the vomiting speedily ceased and the appetite returned. Many other cases occur to us as we write, but the ones quoted above were typical, and will suffice to illustrate the prompt action of the remedy. A lady of middle age was attacked with a sharp pharyngitis, the inflammation, as it was relieved in the pharynx, extending down and involving the larynx and upper

bronchial tubes. The expectoration was bloody and purulent, and the cough frequent and painful. In addition to the usual medication five grain doses of phenacetine was given at first every three hours, and as the cough subsided, every four or six hours. The effect was immediate; with the first dose the whole nervous system was quieted, the cough became less frequent, the temperature diminished, and in a few hours the patient fell into a quiet sleep. The improvement was rapid. There is no doubt the drug produces a very marked effect in relieving the irritability of the nervous system, and acting specially upon the vaso-motor nerves, controls to a certain extent the circulation without any dangerously depressing action upon the heart. As an intercurrent remedy we have reason to believe that in many cases it will supersede opium and its alkaloids and the class of hypnotics of which chloral is the type, because it not only does not prevent, but aids by its quieting power, the specific action of other drugs. We have been particularly pleased with the action of phenacetine in the epidemic of grippe through which we have just passed. In connection with other indicated remedies it has been in our hands of very great service.

THE editor of the *Journal of Homœopathics* evidently differs from the New York County Homœopathic Medical Society in the meaning of the word "homœopathic." The latter defines it as a membership of the County Medical Society, while the former charges the County Medical Society with being "mongrel," and "standing for nothing that is homœopathic but the name." We commend the editorial, which we give below, from the February issue of the *Journal of Homœopathics*, to the County Medical Society. We do not know that the editor is a member of the society, but if he is, if the society is not already tired of the fun, it will probably call a special meeting to discipline him:

#### "MONGRELISM."

"The disgraceful proceedings which the County Society of New York has been indulging in for the past three months, resulted in the censure of Drs. Guernsey and Rankin and the adoption of a resolution requesting the resignation of the former. The whole proceedings were 'cut and dried' beforehand, and a disgrace to the society and the city.

"The County Society stands for nothing that is homœopathic but the name. Dr. Guernsey's arraignment of the society is true. Principle is not

at stake in this contemptible quarrel, it is simply a factional fight, and Dr. Guernsey is probably no further from being a homœopath than the majority of the members of the society. So far as we can learn, there are not over a dozen members who are entitled to the name of homœopath, and we advise them to resign in order that they may escape the onus and disgrace of the action of the society."

The *American Homœopath* says: "The Homœopathic County Medical Society's charge on the Ward's Island Homœopathic Hospital Board has not signally redounded to the advantage of homœopathy. The Ward's Island people are strong in their position because of the weakness of the attacking parties—and they are pitifully weak, if the report of the New York dailies are correct. Thus far every attack on the Times has fallen flat, an absolute failure."

THE *American Medical Journal* says, in speaking of the bill to "regulate the practice of medicine," introduced into the First Legislature of the New State of Washington, "like the majority of such bills, it has been concocted by a medical party with all the party sectarianism instilled," and adds: "It is a commentary—shameful, but true—that when a single medical denomination gets up a bill it is not to 'regulate the practice of medicine,' but to protect and defend its own interests. \* \* \* This kind of medical legislation is sickening and disgusting, and will never become a stepping-stone to the profession of medicine. In this country it is school against school; but in other countries it is a fight in the same school arising from mere national prejudices." We do not believe any bill to regulate the practice of medicine, so far as a State Board of Medical Examiners is concerned, will ever become a law in this State until its preparation is taken out of the hands of medical schools and assumed by the law-makers themselves, in the interests of the whole people. It is a pity if there is not sufficient legal talent in the State to formulate all the bills necessary to regulate the practice of medicine without doing injustice to any one.

#### NATIONAL MEETINGS.

THE next meeting of the American Medical Association will be held at Nashville, Tenn., May 20-23.

The officers are making every effort to have the meeting what it should be—equal to the most sanguine desires.

The next meeting of the American Institute of



Homœopathy will be held at the "Fountain Spring House," Waukesha, Wisconsin, June 16-20. The circular, giving full particulars, may be had by addressing Dr. P. Dudley, 15th and Master Streets, Philadelphia. An interesting meeting is promised.

DR. JAMES THORINGTON gives in the January number of the *American Journal of Medical Science* a valuable resumé of his seven years' experience in active practice on the Isthmus of Panama, during which time cases of yellow fever were constantly under his notice. He found great benefit from the pure juice of lime with small pieces of cracked ice. To relieve the nausea and vomiting, which in the majority of cases seemed to cause death, he resorted to cocaine with the most beneficial results. Before he commenced using cocaine he lost fifty per cent. of his patients, but in twenty cases he treated with cocaine there were but three deaths, and these were from suppression of urine. He commenced with ten minims of a four per cent. solution, but if the vomiting was not checked by the first or second dose, he increased the strength to a half or even a grain every half hour. The author states this drug to be almost a specific, removing all nausea and vomiting, and acting as a heart tonic and diuretic.

DR. ARTHUR MATHEWSON reports a case of cure of epithelioma of the eyelid by the local application of benzole and calomel. The advantages claimed for this method of treatment over that by the use of most other caustics are that the pain is slight and brief, and that while these agents seem to exert a solvent on the imperfectly organized morbid tissues, the adjacent sound tissues are able to resist this action and protect themselves against any tendency to dangerous sloughing.

A BILL to repeal the statute requiring the preliminary education of medical students has already passed to its third reading in the New York Legislature. This repeal is called for by Dr. Austin Flint and others in the interests of certain colleges, on the ground that a large portion of the medical students graduated in the medical colleges of this country are from New York colleges. That the students spend here over a million of dollars every winter, and that the act requiring a preliminary examination drives students to colleges out of the State, and should therefore be abolished. We have here the old cry, "our craft is in danger," in the call for the

repeal of a law which has been most salutary in its action, and which promises excellent results in the future, simply because there is a possibility of its diminishing the funds in college treasuries. The argument making the public good a secondary consideration to the amount of fees poured into the treasury of colleges, is one we are sorry to see made by any man in the medical profession who represents in any degree an institution of learning.

THE *Therapeutic Gazette* for February contains a notice by Dr. Falks, of Berlin, on hydrastinine in uterine hemorrhages. This new alkaloid is formed by heating a mixture of hydrastine and nitric acid, and precipitating with an alkali. The drug seems to be a heart stimulant, and sustains the contractility of the vascular system without the paralyzing tendency of hydrastine. Dr. Falks found in uterine hemorrhage the action of the drug was more prompt and sustained than agotine. Dr. Falks' favorite way of administering hydrastinine is in the form of a hypodermic injection of from five to ten per cent.

#### CREOSOTE IN DISEASE OF THE AIR PASSAGES.

THE use of creosote in the treatment of phthisis pulmonalis dates back to 1830, the year in which it was discovered by Reichenbach, of Blasau, in Moravia. Later on, it fell into disuse, like some other valuable medications, and for nearly thirty years previous to 1877, it was practically of little or no importance in the therapeutics of pulmonary disease.

In 1877, Bouchard and Gimbert published in the *Gazette Hebdomadaire* a very complete article on its beneficial effects in consumption; and in 1878, Beverly Robinson said (*Med. Record*) "I am very much pleased with this remedy, and believe it merits a very extensive trial." During the succeeding seven years, Robinson continued its use, believing it to be a good anti-catarrhal agent, and upon the publication of Jaccoud's "Treatise on Pulmonary Phthisis," he became very much impressed with his statements about the advantages resulting from the internal exhibition of creosote in this disease, and in an address before the American Climatological Association, May 27, 1885, and in a clinical lecture at Bellevue Hospital Medical College, he advocates very warmly the use of creosote as an inhalant and by the stomach in the treatment of pulmonary phthisis.

In the summer of 1888, on entering upon his service in the Bellevue Hospital, Dr. Austin Flint (*N. Y. Med. Jour.*, Dec. 8, 1888) noticed a number of patients in the wards of the third division wearing what are known as "Perforated-zinc inhalers." For several weeks these patients had been treated with inhalations of creosote by Dr. Robinson's method. The improvement noted in these cases was so considerable that Dr. Flint directed the treatment to be employed in all the cases of phthisis pulmonalis in the male wards, with the exception of a few cases of the last stages of the disease. A considerable number of cases did not remain under observation as long as two weeks. In

the ten cases reported the treatment was followed for two or more weeks. In addition to the inhalations in all the cases reported, creosote was also administered by the stomach, and in some cases other remedies were employed.

The inhalers consist simply of a sheet of perforated zinc or tin, bent into a pyramidal shape and large enough to cover conveniently the nose and mouth. At the apex of the pyramid a bit of sponge is firmly held by means of strings in two bends in the margin of the zinc plate. Between the sponge and the mouth and nose there is a vacant space, which obviates the stifling feeling which is so objectionable in the use of inhalers that are applied closely over the face. The inhaler is held in place by two narrow elastic bands, which pass around the ears. Before beginning an inhalation, the sponge should be properly moistened with water or alcohol, and the inhaling fluid poured upon it.

In the cases reported, the fluid used consisted of equal parts of creosote, alcohol, and spirit of chloroform. Of this mixture, ten to fifteen drops were put upon the sponge. The treatment was begun with an inhalation of fifteen minutes duration three or four times daily, increased until, in some cases, the inhalers were worn almost constantly except at night. There was no irritation produced by the inhalation, all the patients saying that after a few trials it relieved the cough and the irritability of the throat. In some cases in which the sweating at night was very profuse, atropine, 1-96 of a grain, with fifteen drops of aromatic sulphuric acid, was given at bedtime. In a number of cases in which the appetite was very poor, a tonic, usually a mixture of iron, quinine and strychnine, was administered before meal. In some cases in which the cough was very severe a palliative cough mixture of spirit of chloroform, dilute hydrocyanic acid, and syrup of wild cherry was used. No other medication was employed.

The record of the ten cases reported show that creosote by the stomach and the inhalations, in cases of solidification without cavities, effects prompt and decided improvements in all phthisical symptoms, with increase in appetite, weight and strength, even with surroundings much less favorable than would obtain in many cases in private practice. In cases with small cavities much less improvement is to be looked for, but some benefit may be expected. The treatment seems to have little in cases with large cavities more than a palliative influence.

The observations here alluded to were defective as regards the influence of the treatment upon the bacilli. In one case, with large cavities, it was noted that the number of bacilli was diminished. No other examinations for bacilli were made during or after treatment.

No estimate was made of the relative value of creosote taken into the stomach. As regards the inhalations, it is assumed that the chief benefit was derived from the creosote, the spirit of chloroform and the alcohol rendering this agent more volatile, and soothing the mucous surfaces. The inhaled vapor undoubtedly penetrated by diffusion as far as the air cells. It is by diffusion that fresh air, anesthetic vapors, etc., penetrate the lungs, and cases of pneumokoniosis illustrate the fact that even solid particles may be carried by the pulmonary vesicles. Dr. Flint states that he has employed the method of inhalation here described, conjoined with other treatment, in private practice, with good results. In a case of irritative cough of several months' standing, with slight bronchitis and emphysema, but no signs of phthisis, which resisted ordinary treatment,

three inhalations produced complete relief, and the cough had not reappeared at the end of four weeks.

Dr. William Perry Watson, in a paper reprinted from the *Virginia Medical Monthly*, says that Dr. Flint's article impressed him so favorably that further investigation of the literature of the subject led him to commence the use of this remedy during his service of December, 1888, in St. Francis hospital, Jersey City.

"Three factors," Dr. Watson remarks, "will always regulate, to a great extent, the general use of any remedy by the laboring classes (and they are the ones usually treated medicinally), namely, first, the cost; second, ease of application; and third, the immediate advantages perceived. In the case of creosote, the first two factors are easily complied with; and if further investigations shall substantiate those already made, the third one will be satisfactorily settled.

"The cases reported were not selected, and it is well known many of these cases usually seek a hospital for a comfortable home in which to die. That the improvement in some of these cases may be ascribed to a change of living, good diet and rest, is quite true, but it can not account for the permanent relief obtained in others. Again, it is well known that glycerine and whiskey are excellent remedies for so-called coughs, to say nothing of their stimulating and sustaining qualities.

"After the use of inhalers for a few days, the comparative sweetness and purity of the atmosphere of the wards was remarked by the visiting staff and the sisters in charge."

The inhaler used was Robinson's Perforated Zinc Inhaler, made by W. F. Ford, of Hazard, Hazard & Co., New York. The inhalants used were as follows:

- (1) B. Creosoti (Morson's).....  
Sp. Chloroformi.....  
Alcoholis.....aa equal parts.

M. S. Five to twenty drops, to be used on the inhaler every three hours.

- (2) B. Iodoformi.....gr. xxiv.  
Creosoti (Morson's).....M. iv.  
Ol. Eucalypti.....M. viij.  
Chloroformi.....M. xlvij.  
Alcoholis.....  
Aetheris.....aa. q. s. ad ʒ ss.

M. S. Five to twenty drops, to be used on inhaler every three hours.

Internally, creosote was given in the following formula:

- B. Creosoti (Morsons).....M. xij.  
Glycerinae (Price's).....ʒ j.  
Sp. Frumenti.....q. s. ad ʒ ij.

M. S. Half a teaspoonful every three hours, well diluted.

Cough medicines were frequently used. For the diarrhoea, powdered opium and tannin were usually prescribed.

Of the unselected fifty cases of disease of the air-passages, eight were in the last stages of consumption; and while improvement was noticed for a few days after the creosote treatment was used, yet it had no permanent effect.

Of sixteen cases with simply consolidation, the improvement was so marked in all cases but two (one complicated with chronic Bright's disease and one with consolidation at both apices), that they were discharged from the hospital.

Of six cases of chronic bronchitis, some with emphysema, others with pleural thickening, all were markedly improved by the treatment.

Of five cases of acute bronchitis, all were rapidly cured,

A case of acute pleuritis, with effusion, was quickly cured.

The cases of laryngeal phthisis were improved.

A case of acute laryngitis was cured by the inhalations alone.

The cases of nasal catarrh, as a complication, were quickly cured.

The author concludes from his report of cases, "that while creosote will not cure all cases of consumption, yet it will benefit nearly all; that in cases with simply consolidation before the 'breaking down' process begins, it seems to arrest the diseased process, and further investigations will be required to ascertain its permanent utility, although similar cases observed for a long time by Robinson and Flint would convince us that the improvement was lasting.

"In acute and chronic disease of the bronchi, its use was very marked, cases of the former being quickly cured, while those of the latter were improved sufficiently for them to leave the hospital in a short time. Another very important fact noticed in these experiments was that the more constantly the inhaler was worn, and the internal mixture taken, the more marked was the improvement; so that I am satisfied that, to obtain the full benefits of this treatment, the system should be saturated with the creosote as rapidly as possible; and while I should not expect any miraculous cures, yet I believe it is, combined with good hygienic and dietetic surroundings, the most promising treatment of consumption in the laboring classes we yet possess."

#### THE DREAD OF DEATH.

SIR LYON PLAYFAIR, in a letter to Junius Henry Browne, author of a paper with the above title, says (*Science*, Oct. 18, 1889): "Having represented a large constituency (the University of Edinburgh) for seventeen years as a member of Parliament, I naturally came in contact with the most eminent medical men in England. I have put the question to most of them: 'Did you, in your extensive practice, ever know a patient who was afraid to die?' With two exceptions they answered, 'No.' One of these exceptions was Sir Benjamin Brodie, who said he had seen one case. The other was Sir Robert Christison, who had seen one case, that of a girl of bad character who had a sudden accident. I have known three friends who were partially devoured by wild beasts under apparently hopeless circumstances of escape. The first was Livingstone, the great African traveler, who was knocked on his back by a lion, which began to munch his arm. He assured me that he felt no pain or fear, and that his only feeling was one of intense curiosity as to which part of his body the lion would take next. The next was Rustem Pasha, now Turkish ambassador in London. A bear attacked him, and tore off part of his hand, and part of his arm and shoulder. He also assured me that he had neither pain nor fear, but that he felt excessively angry because the bear grunted with so much satisfaction in munching him. The third case is that of Sir Edward Bradford, an Indian officer, now occupying a high position in the Indian service. He was seized in a solitary place by a tiger, which held him firmly behind the shoulders with one paw, and then deliberately devoured the whole of his arm, beginning at the end and

finishing at the shoulder. He was positive that he had no sensation of fear, and thinks that he felt a little pain when the fangs went through his hand, but is certain that he felt none during the munching of his arm.

#### BIBLIOGRAPHICAL.

SYLLABUS OF THE OBSTETRICAL LECTURES, IN THE MEDICAL DEPARTMENT OF THE UNIVERSITY OF PENNSYLVANIA. By Richard C. Norris, A. M., M. D., Demonstrator of Obstetrics. Philadelphia: W. B. Saunders, 1890, pp. 154, 12mo. Price \$2.00.

The student will find this a most useful book, and the general practitioner will find it a convenient hand-book to brush up with.

NINTH ANNUAL REPORT OF THE STATE BOARD OF HEALTH OF NEW YORK. Albany: 1889.

This volume contains, in addition to the usual text, several elaborate maps and charts which will be found useful for reference.

A CYCLOPÆDIA OF DRUG PATHOGENESY. Edited by Richard Hughes, M. D., and J. P. Dake, M. D. Part XI. Natrium Muraticum—Phosphorus. London: E. Gould & Son; New York: Boericke & Tafel.

As will be seen, this publication is rapidly nearing completion, and those who desire a copy must make haste to get it while it may be had.

THE TWELVE TISSUE REMEDIES OF SCHÜSSLER. COMPRISING THE THEORY, THERAPEUTICAL APPLICATION, MATERIA MEDICA AND A COMPLETE REPERTORY OF THESE REMEDIES. Arranged and Compiled by Wm. Boericke, M. D., and W. A. Dewey, M. D. Second Edition. Revised and Enlarged. Philadelphia: Hahnemann Publishing House, 1890. Pp. 325, 8vo.

This work is so well-known that it is necessary only to announce the issue of a second edition with thorough revision and enlargement. We quite agree with the editors that these remedies "merit careful proving in order to obtain the finer and more distinctive points for their therapeutic application," in other words, their *individualization*!

A TEXT-BOOK ON DISEASES OF THE EYE. By Henry D. Noyes, A.M., M.D., Professor of Ophthalmology and Otology in Bellevue Hospital Medical College; Executive Surgeon to the New York Eye and Ear Infirmary; recently President of the American Ophthalmological Society, etc., etc. Royal octavo, 733 pages, richly illustrated with chromo-lithographic plates and 236 engravings. Price, bound in extra muslin, \$6.00; in sheep, \$7.00. New York: William Wood & Co.

This volume is an outgrowth from a treatise on diseases of the eye, published in December, 1881, in Wood's "Library of Standard Medical Authors." A similar arrangement of subjects has been adhered to, viz., in the first part the general anatomy and physiology of the eye, with its functional disorders; the second part is devoted to inflammations and organic textual changes. The spirit of the book is clinical, but the author recognizes that an adequate preparation for clinical and practical work includes a wide range of preliminary knowledge. To the preparation and experience needed in general medicine must be added, for proper treatment of troubles of the eye, knowledge which comes through physics, mathematics and physiological optics. Laboratory research has won some of its most brilliant triumphs in studies of the eye. While mathemat-



ical formula have been omitted, the writer has discussed the pathology and microscopic anatomy of the eye so far as seemed helpful to an intelligent account of morbid processes; the effect of micro-organisms upon the eye, the relation of the eye to the brain and nervous system, as well as the kidneys, the heart, the uterus are discussed with great clearness and force. Dr. Noyes has prepared a work not only of real value to the specialist, but full of practical information to the general practitioner.

**THE NEUROSES OF THE GENITO-URINARY SYSTEM IN THE MALE WITH STERILITY AND IMPOTENCE.** By Dr. R. Uitzmann, of the University of Vienna. Translated by George W. Allen, M.D. F. A. Davis, Publisher, Philadelphia, 1889.

Prof. Uitzmann's prominence in his specialty and his well-known sound pathological teachings and successful treatment, will give additional interest to the two monographs which are included in this small volume.

**ESSENTIALS OF GYNECOLOGY,** Arranged in the Form of Questions and Answers, Prepared Especially for Students of Medicine. By Edwin B. Crayer, M.D. With fifty-eight illustrations. Philadelphia: W. B. Saunders, 1890.

This little work is No. 10 of Saunders' "Question Compens," and in the form of question and answer gives a very concise and excellent *résumé* of the essentials of gynecology.

**HOW TO PRESERVE HEALTH.** By Louis Barkan, M.D., New York Exchange Printing Co., 47 Broad Street, 1890.

Dr. Barkan has condensed within the limits of a duodecimo volume of three hundred and fifty pages, a whole library of practical information upon the all important questions to every one of "How to preserve health." The facts are given in such a clear and pleasant manner as to be easily retained in the memory. If a copy of this little book could find its way into every household, the comfort and health of families would be vastly increased.

**THE STUDENTS' SURGERY.** A Multum in Parvo. By Frederick James Gant, F.R.C.S., Senior Surgeon to the Royal Free Hospital. Philadelphia: Lea Brothers & Co., 1890, pp. 817, 12mo.

The title of this book indicates its exact scope, and all we need say is, that it is all it claims to be.

The text is clearly and concisely rendered, and the work is just what the student requires.

**PRACTICAL ELECTRICITY IN MEDICINE AND SURGERY.** By G. A. Liebig, Jr., Ph.D., and George H. Rohé, M.D. Illustrated. Philadelphia: E. A. Davis, Publisher. Price, \$2.00 net; 1890.

The volume is divided into three parts, the first dealing with electricity and magnetism only, the second with electro-physiology and electro-diagnosis, and the third with the applications of electricity and magnetism for medical and surgical practice. In Part I he discusses the various forms of electrical and magnetic apparatus, as well as the most suitable arrangement of cells for any given work, the construction and use of galvanometers, the theory of the chemical action taking place in the storage cells and the best methods of caring for such batteries, to which is added a short description of the electric motor, the telephone and phonograph. Part II takes up the effect of electric currents upon the various tissues and organs of the body in health, and shows how these effects are modified by disease,

indicating the methods by which these modifications are utilized for purposes of diagnosis. Part III is devoted to a careful consideration of the application of electricity in the treatment of disease. The entire work is thoroughly scientific and practical, and is really what the authors have aimed to produce, "a trustworthy guide to the application of electricity in the practice of medicine and surgery."

**THE YEAR BOOK FOR 1890.** Philadelphia: Lea Brothers & Co.

A very admirable *résumé* of the work of the last year, condensing in a small space the life and pith of scientific and practical pursuits in the periodical literature of the world.

The first volume of the great English gynecologist, Mr. Lawson Tait, just issued by Lea Brothers & Co., on abdominal surgery, was so fully noticed in a recent number of the *Times* by our correspondent, Dr. H. I. Ostrom, who acted as assistant of Mr. Tait during the summer, that we shall postpone a full consideration of the work till the appearance of the second volume.

**SPINAL CONCUSSION: Surgically Considered as a Cause of Spinal Injury, and Neurologically Restricted to a Certain Symptom Group for which is Suggested the Designation Erichsen's Disease, as One Form of the Traumatic Neuroses.** By S. V. Clevenger, M.D. Philadelphia and London: F. A. Davis, publisher, 1890.

The literature of spinal concussion has been increasing of late to an unwieldy shape for the general student, and Dr. Clevenger has in this work arranged and reviewed all that has been done by observers since the days of Erichsen and those who preceded him.

The different and sometimes antagonistic views of many authors are fully given from the writings of Erichsen, Page, Oppenheim, Erb, Westphal, Abercrombie, Sir Astley, Cooper, Boyer, Charcot, Leyden, Rigler, Spitzka, Putman, Knapp, Dana, and many other European and American students of the subject. The small, but important, work of Oppenheim, of the Berlin University, is fully translated, and constitutes a chapter of Dr. Clevenger's book, and reference is made wherever discussions occurred in American medicolegal societies. There are abundant illustrations, particularly for Electro-diagnosis, and to enable a clear comprehension of the anatomical and pathological relations.

The Chapters are: I. Historical Introduction; II. Erichsen on Spinal Concussion; III. Page on Injuries of the Spine and Spinal Cord; IV. Recent Discussions of Spinal Concussion; V. Oppenheim on Traumatic Neuroses; VI. Illustrative Cases from Original and all other Sources; VII. Traumatic Insanity; VIII. The Spinal Column; IX. Symptoms; X. Diagnosis; XI. Pathology; XII. Treatment; XIII. Medico-legal Consideration.

Other special features consist in a description of modern methods of diagnosis by Electricity, a discussion of the controversy concerning hysteria, and the author's original pathological view that the lesion is one involving the spinal sympathetic nervous system. In this latter respect entirely new ground is taken, and the diversity of opinion concerning the functional and organic nature of the disease is afforded a basis for reconciliation.

**Phosphorus in Diabetes.**—Dr. Balmanno Squire, of London, notes in the *British Medical Journal* (November 30, 1889) his success in the treatment of diabetes by phosphorus, applied for eczema in a glycosuric subject. The dose at first is one-tenth of a grain, increased to one-fifth of a grain three times daily.

## CORRESPONDENCE.

## AMERICAN HOMŒOPATHIC EDITORS.

I HAVE never yet looked at a photograph of the Colosseum without wondering if there is in me that divine courage of a conviction which would enable me to stand up in its arena and be devoured by a Numidian lion, infuriated from hunger. Alas! my dust is not so nearly allied to grandeur.\*

On the other hand, it has never been a question whether I could patiently bear to be kicked in the columns of an American homœopathic journal by an *Asinus communis*, from "pure cussedness:" of which psychological fact this paper is ample evidence.

Some friend has sent me a copy of *The American Homœopathist* for March, and turning to the pages pencil-marked, I find myself wilfully misrepresented and stupidly misunderstood by its editor. Why will American homœopathic editors write so ambiguously? This one disclaims "any purpose of engaging in a wordy strife" with me, nor will he even "defend 'That Handbook;'" he has simply "the view of holding up our (his) own end of the line primarily." For Heaven's sake which end—ears or tail? Of course, there's no 'choice of evils' here, "primarily," so I must keep an eye on both ends—a doubly delectable spectacle!

One of these indeterminable ends says—"all of them"—the homœopathic journals—are charged with incompetency in matters pertaining to the line of their duties." As regards the 'incompetency;' correct to the dot over the *i*: as regards *all the homœopathic journals*; pure Jackacuity† unless he means that all the *homœopathic journals* are "American"—an assertion that makes me wonder *which* end is speaking.

I said, "Not one of these journals (*id est* 'American homœopathic') is competent to review the work that he has praised. *Not one of them all has access to the literature necessary to enable a review.*"

Whereupon *one* of the ends declares, "*He should have given some reason for the faith that was in him!*" (I say "one of the ends" in my perplexity; for, though having something of an ear for music, I could not swear if the above utterance is *tussis* or *crepitus*.)

\* \* \* \* \*

\* So near to grandeur is our dust,  
So nigh to God is Man;  
When duty whispers low, *Thou must*,  
The youth replies, *I can*.

† Mr. J. J. Thomas has aptly christened "Froude's libels" *Froudacuity*. We now have mendacity, Froudacuity, and Jackacuity: synonyms from one and the same root.

Ah! who was the old fellow in the ancient days that ran about the streets, *sans shirtailibus*, leaping with delight and shouting *Eureka!* I know exactly how he felt, for it has just dawned upon me that this editor is "holding up our own end of the line" as "*one* of the editors of these journals." What a *dumkopf* I am to mistake him for a —! Yet, from his manner of reasoning, how *could* I distinguish the difference?

\* \* \* \* \*

This line-end-holding-up editor has, evidently, written "in the hurly-burly of editorial work"—a method characteristic of the "American homœopathic editor," whose *fluxus de bouche* is the "key-note" to his mental constipation. Don't misunderstand me; I mean the existing species. I do not mean those older ones who have long since been "translated" to that higher "see" where all that perplexed them here is illumined by the light ineffable.

Of the long and weary years of hungering and waiting for a complete text of our *materia medica* in our mother tongue, this editor knows not; he never felt that "famine in the land;" he never shared in the delight that lit up our faces when at last it was said that the crying shame of American homœopathy was about to be blotted from our history. To-day he does not know the trust betrayed, the hopes belied, in that the bread of our life is still adulterated, and all because, in accordance with laws older than the stone-graven tables of Sinai, *the fountain can not rise higher than its source*.

If that source be a bog of vanity, the stream is but an ooze of rotten self-conceit; whilst if the origin is simple love of truth, the sunbeams catch it when its force is spent, and build a bow of promise in the skies—its every drop a shining glory in the eyes of men.

Of an iniquitous adulteration, it remained for the editor of an *American* homœopathic journal to declare, with the double hardihood of ignorance and impudence—"A *part* must be taken for the whole!"

Does even "the hurly-burly of editorial work" extenuate such an elastic morality concerning the *validity of a text on which must often depend the issues of life and death?*

Not so! have said a Dudgeon and a Yeldham, gray in experience; not so! have said a Hughes and a Burnett, graced with the green chaplet of a ripe scholarship.

A feeling of unspeakable compassion for a "hurly-burly" editor fills me, and I am moved to quote for his delectation a fragment of a paper, the whole of which we can find in the *Annals of*

the *British Homœopathic Society*, p. 684, No. iiv., February, 1882.

"For instance, if you turn to p. 327 [*Encyclopedia*, Vol. X] in Allen, you will find some would-be information about the effects of *silver* on the urine. This is partly a mere jumble of two or three things, and partly absolutely false. For instance, you learn from Allen that the amount of urea was not perceptibly changed, but the very opposite was the case. The amount of urea was notably *diminished*. Allen says the whole amount of urea daily excreted was 1.5 gramme (*sic*), whereas that is precisely the amount of its *diminution*, i. e., the daily *diminution* in the amount of urea excreted was 1.5 gramme (*sic*)."

As the "*Encyclopedia*" is the acknowledged source of the "*Handbook*," does it begin to dawn upon the callow editor of *The American Homœopathist* that my veiled hint about a *core of solid truth* may not have been "really unfair" IN THE FACE OF UNANSWERABLE FACTS? May not have been "hypercritical!"

I wrote my notice of the *Handbook* not in "the hurly-burly of editorial work," but in a suburban town whose quietude is well known to Dr. Kraft. I wrote, as he also knows, almost under the eaves of a "homœopathic" college which is in the stage of fatty degeneration immediately preceding absorption, and all because it is vainly attempting to palm off the name of a thing for the *thing itself*. I wrote, as he still further knows, crowned with gray hairs, on which the shadows of eternity are daily deepening—does he think I wrote in JEST!

What in the name of honest criticism am I to think of an A.M., an M.D., an LL.D., and a dean of a medical college who says of the same drug, in the same experiment, "the amount of urea was not perceptibly changed," and "the whole amount of urea daily excreted was 1.5 grammes?!" In the first place, as an M.D., not a disgrace to his title, he should know that *silver* is a carbo-nitrogenized remedy, and that as such it MUST "*perceptibly change*" the amount of urea from incomplete oxidation. If he does not know this, he should at once vacate a chair of materia medica—at least, until he has learned it. And, in the second place, if he thinks a daily excretion of only 1.5 grammes of urea is not a *perceptible* change in the amount of urea, he should at once read some primer of physiological chemistry. And, in the third place, if he imagines that life can continue with a daily elimina-

tion of only 1.5 grammes of urea, he should incontinently retire from practice, and rest on his laurels as the "editor" of the *Encyclopedia* and the "author" of the *Handbook*.

It is time for the unvarnished truth, and you have it. If the so-called "homœopathic school" in America thinks that the shibboleth of a trade-mark (for which there is no "patent") is the secret of eternal life, it will ere long have a terrible awakening. The religions are being tried as by fire; the pet "pathy" of the people will not escape!

S. A. JONES.

Ann Arbor, March 22, 1890.

*Post Scriptum*.—I wrote from my heart at night, and in the calm, cool gray of the morning I have reviewed it. With my heart's sanction I now send it. I have earned the right to make such an utterance. For thirty-three years, as student and "doctor," I have served the homœopathic school, according to my light, in an unswerving fidelity. As a student I was punished for protesting against shams in a homœopathic college; as a professor in the University of Michigan I was slain by lies for protesting against incompetence in a homœopathic college; as a journalist I am deemed "personal" for calling things by the only names they can bear in the *lumen siccum* of eternity. As a gray-haired man, I find myself standing by the convictions of my earliest manhood—standing firmer, despite all my failings. I am content. I shall at last be judged by a greater than Cæsar. I do not shrink from even his arbitrament.

#### DR. STEWART'S REPLY TO "REJOINDER."

*Messrs. Editors*.—I read with much interest the rejoinder to my letter replying to the criticism of my article in your January number entitled "*A Serious Menace to the Medical Profession of America*." There is much in this rejoinder that I would be pleased to comment upon did time and space permit. Your correspondent has fallen into a very common error, however, which accounts entirely for his position on this question. Looking at it from his point of view, he very naturally is excited to righteous indignation. Has an inventor a natural right at common law to the exclusive right of his invention, or is his right simply one of statute and of grant obtainable only by patenting his invention? If the former, then I am wrong. Laws should be passed and enforced protecting the inventor, in his rights, and your correspondent has the *ethical* side of the question. If, on the contrary, the right to copy an invention is a public right, then the government, representing the public at large, has a right to grant to authors and inventors for *limited* times the exclusive right to their respective writings and discoveries. If this is a public right, then your correspondent, through ignorance of the fact, evidently, is left in a position not to be envied, for he advocates a policy contrary to good government.

Laws are passed, not for the benefit of a privileged few, but for the benefit of the whole country. The patent law was not passed primarily for the benefit of inventors, but

\* In reading his paper, Dr. Burnett may have said "one gramme and a half." If so, my "*sic*" is "out of order."



## CORRESPONDENCE.

## AMERICAN HOMŒOPATHIC EDITORS.

I HAVE never yet looked at a photograph of the Collosseum without wondering if there is in me that divine courage of a conviction which would enable me to stand up in its arena and be devoured by a Numidian lion, infuriated from hunger. Alas! my dust is not so nearly allied to grandeur.\*

On the other hand, it has never been a question whether I could patiently bear to be kicked in the columns of an American homœopathic journal by an *Asinus communis*, from "pure cussedness:" of which psychological fact this paper is ample evidence.

Some friend has sent me a copy of *The American Homœopathist* for March, and turning to the pages pencil-marked, I find myself wilfully misrepresented and stupidly misunderstood by its editor. Why will American homœopathic editors write so ambiguously? This one disclaims "any purpose of engaging in a wordy strife" with me, nor will he even "defend 'That Handbook;'" he has simply "the view of holding up our (his) own end of the line primarily." For Heaven's sake which end—ears or tail? Of course, there's no 'choice of evils' here, "primarily," so I must keep an eye on both ends—a doubly delectable spectacle!

One of these indeterminable ends says—"all of them"—the homœopathic journals—are charged with incompetency in matters pertaining to the line of their duties." As regards the 'incompetency;' correct to the dot over the *i*: as regards *all the homœopathic journals*; pure Jackacity† unless he means that all the *homœopathic journals* are "American"—an assertion that makes me wonder *which* end is speaking.

I said, "Not one of these journals (*id est* 'American homœopathic') is competent to review the work that he has praised. *Not one of them all has access to the literature necessary to enable a review.*"

Whereupon *one* of the ends declares, "*He should have given some reason for the faith that was in him!*" (I say "one of the ends" in my perplexity; for, though having something of an ear for music, I could not swear if the above utterance is *tussis* or *crepitus*.)

\* \* \* \* \*

\* So near to grandeur is our dust,  
So nigh to God is Man;  
When duty whispers low, *Thou must*,  
The youth replies, *I can*.

† Mr. J. J. Thomas has aptly christened "Froude's libels" *Froudacity*. We now have mendacity, Froudacity, and Jackacity: synonyms from one and the same root.

Ah! who was the old fellow in the ancient days that ran about the streets, *sans shirttailibus*, leaping with delight and shouting *Eureka!* I know exactly how he felt, for it has just dawned upon me that this editor is "holding up our own end of the line" as "*one* of the editors of these journals." What a *dunkopf* I am to mistake him for a —! Yet, from his manner of reasoning, how *could* I distinguish the difference?

\* \* \* \* \*

This line-end-holding-up editor has, evidently, written "in the hurly-burly of editorial work"—a method characteristic of the "American homœopathic editor," whose *fluxe de bouche* is the "key-note" to his mental constipation. Don't misunderstand me; I mean the existing species. I do not mean those older ones who have long since been "translated" to that higher "see" where all that perplexed them here is illumined by the light ineffable.

Of the long and weary years of hungering and waiting for a complete text of our *materia medica* in our mother tongue, this editor knows not; he never felt that "famine in the land;" he never shared in the delight that lit up our faces when at last it was said that the crying shame of American homœopathy was about to be blotted from our history. To-day he does not know the trust betrayed, the hopes belied, in that the bread of our life is still adulterated, and all because, in accordance with laws older than the stone-graven tables of Sinai, *the fountain can not rise higher than its source*.

If that source be a bog of vanity, the stream is but an ooze of rotten self-conceit; whilst if the origin is simple love of truth, the sunbeams catch it when its force is spent, and build a bow of promise in the skies—its every drop a shining glory in the eyes of men.

Of an iniquitous adulteration, it remained for the editor of an *American* homœopathic journal to declare, with the double hardihood of ignorance and impudence—"A part must be taken for the whole!"

Does even "the hurly-burly of editorial work" extenuate such an elastic morality concerning the *validity of a text on which must often depend the issues of life and death?*

Not so! have said a Dudgeon and a Yeldham, gray in experience; not so! have said a Hughes and a Burnett, graced with the green chaplet of a ripe scholarship.

A feeling of unspeakable compassion for a "hurly-burly" editor fills me, and I am moved to quote for his delectation a fragment of a paper, the whole of which we can find in the *Annals of*

the *British Homœopathic Society*, p. 684, No. iiv., February, 1882.

"For instance, if you turn to p. 327 [*Encyclopedia*, Vol. X] in Allen, you will find some would-be information about the effects of *silver* on the urine. This is partly a mere jumble of two or three things, and partly absolutely false. For instance, you learn from Allen that the amount of urea was not perceptibly changed, but the very opposite was the case. The amount of urea was notably *diminished*. Allen says the whole amount of urea daily excreted was 1.5 gramme (*sic*), whereas that is precisely the amount of its *diminution*, i. e., the daily *diminution* in the amount of urea excreted was 1.5 gramme (*sic*)."

As the "*Encyclopedia*" is the acknowledged source of the "*Handbook*," does it begin to dawn upon the callow editor of *The American Homœopathist* that my veiled hint about a *core of solid truth* may not have been "really unfair" IN THE FACE OF UNANSWERABLE FACTS? May not have been "hypercritical!"

I wrote my notice of the *Handbook* not in "the hurly-burly of editorial work," but in a suburban town whose quietude is well known to Dr. Kraft. I wrote, as he also knows, almost under the eaves of a "homœopathic" college which is in the stage of fatty degeneration immediately preceding absorption, and all because it is vainly attempting to palm off the name of a thing for the *thing itself*. I wrote, as he still further knows, crowned with gray hairs, on which the shadows of eternity are daily deepening—does he think I wrote in JEST!

What in the name of honest criticism am I to think of an A.M., an M.D., an LL.D., and a dean of a medical college who says of the same drug, in the same experiment, "the amount of urea was not perceptibly changed," and "the whole amount of urea daily excreted was 1.5 grammes?!" In the first place, as an M.D., not a disgrace to his title, he should know that *silver* is a carbo-nitrogenized remedy, and that as such it MUST "*perceptibly change*" the amount of urea from incomplete oxidation. If he does not know this, he should at once vacate a chair of materia medica—at least, until he has learned it. And, in the second place, if he thinks a daily excretion of only 1.5 grammes of urea is not a *perceptible* change in the amount of urea, he should at once read some primer of physiological chemistry. And, in the third place, if he imagines that life can continue with a daily elimina-

tion of only 1.5 grammes of urea, he should incontinently retire from practice, and rest on his laurels as the "editor" of the *Encyclopedia* and the "author" of the *Handbook*.

It is time for the unvarnished truth, and you have it. If the so-called "homœopathic school" in America thinks that the shibboleth of a trade-mark (for which there is no "patent") is the secret of eternal life, it will ere long have a terrible awakening. The religions are being tried as by fire; the pet "'pathy" of the people will not escape!

S. A. JONES.

Ann Arbor, March 22, 1890.

*Post Scriptum*.—I wrote from my heart at night, and in the calm, cool gray of the morning I have reviewed it. With my heart's sanction I now send it. I have earned the right to make such an utterance. For thirty-three years, as student and "doctor," I have served the homœopathic school, according to my light, in an unswerving fidelity. As a student I was punished for protesting against shams in a homœopathic college; as a professor in the University of Michigan I was slain by lies for protesting against incompetence in a homœopathic college; as a journalist I am deemed "personal" for calling things by the only names they can bear in the *lumen siccum* of eternity. As a gray-haired man, I find myself standing by the convictions of my earliest manhood—standing firmer, despite all my failings. I am content. I shall at last be judged by a greater than Cæsar. I do not shrink from even his arbitrament.

#### DR. STEWART'S REPLY TO "REJOINDER."

*Messrs. Editors*.—I read with much interest the rejoinder to my letter replying to the criticism of my article in your January number entitled "*A Serious Menace to the Medical Profession of America*." There is much in this rejoinder that I would be pleased to comment upon did time and space permit. Your correspondent has fallen into a very common error, however, which accounts entirely for his position on this question. Looking at it from his point of view, he very naturally is excited to righteous indignation. Has an inventor a natural right at common law to the exclusive right of his invention, or is his right simply one of statute and of grant obtainable only by patenting his invention? If the former, then I am wrong. Laws should be passed and enforced protecting the inventor, in his rights, and your correspondent has the ethical side of the question. If, on the contrary, the right to copy an invention is a public right, then the government, representing the public at large, has a right to grant to authors and inventors for limited times the exclusive right to their respective writings and discoveries. If this is a public right, then your correspondent, through ignorance of the fact, evidently, is left in a position not to be envied, for he advocates a policy contrary to good government.

Laws are passed, not for the benefit of a privileged few, but for the benefit of the whole country. The patent law was not passed primarily for the benefit of inventors, but

\* In reading his paper, Dr. Burnett may have said "one gramme and a half." If so, my "*sic*" is "out of order."

to benefit the public by promoting progress in science and the arts. The inventor is a means to that end, or can be made so, by granting him for a *limited* time the exclusive use of his invention, *in exchange for a full knowledge thereof whereby the public may manufacture the invention when the patent expires.*

If the public does not own the right how can it grant the right to inventors? Again, what right has the public to pass a law by taking advantage of which the inventor is deprived of his natural right in seven, ten, fourteen or any number of years provided for in the patent law? It may be said that the public purchase the right of the inventor in exchange for a patent; but this is manifestly absurd.

Now, the proprietary trade, as it is called, take the position with your correspondent that inventors have a natural right at common law to the exclusive use of their inventions. This they are endeavoring to enforce in the following manner:

1st. When the patent for an invention expires the public has a perfect right to make and sell it under the name by which it has become known. The proprietary trade say that this is not always so, for the names given by inventors to their inventions are often registered in the Patent Office at Washington as trade-marks, and consequently remain private property for an indefinite time, or forever, even after the patent on the article expires. The claim is that, while the public may manufacture and sell the article under another name, the so-called trade-mark name never becomes public property.

2d. When a new article is introduced not before known to the public, the manufacturer has a right to protect himself in his natural right to the exclusive use of his invention by registering its name as a trade-mark, provided he is careful to give the article an abstract or meaningless name not descriptive of the article.

To sum up the whole matter, the proprietary trade teach the doctrine of natural or common law right to inventions, and endeavor to perpetuate that so-called right by naming their alleged inventions with fanciful names, registering said names in the Patent Office, and endeavoring to hold them as trade-marks.

I hear the author of "Rejoinder" say: Yes, that is a fair statement of the facts of the case, and what have you to say against it?

I have this to say:

1st. I have good authority to prove that the right to copy inventions and writings is not a natural or common law right.

2d. I also have authority to prove that when a patent for an invention runs out the public has a right to make and sell it under the name by which it is known.

3d. I can also prove that when a new article is introduced its name can not be a trade-mark.

Under the first head, let us consider for a few moments the true or *ethical* side of the question.

Simonds, in his very interesting *Manual of the Patent Law*, says:

"Many, and perhaps the great majority of inventors, have incorrect ideas of the nature of a patent privilege. Starting from false premises, they reason wrongly about various questions that arise, and are never able to comprehend why the laws read as they do, or why the courts make certain construction of the laws. A correct conception of the nature of a patent grant, and of the reasons upon which the patent law is based, will do much to clear up the difficulties of this nature that often beset inventors. The belief is very generally entertained, that inventors have a natural right to their inventions, of the same kind given by the statute, irrespective of the actual passage of the law. "Such is not the fact."

"The right to the exclusive use of an invention is not a natural right—that is, pertaining to a man in a state of nature; but, when it exists at all, it is a civil right, pertaining to man under the protection of a civil government."

"An inventor has no right to his invention at common law. He has no right of property in it originally. The right which he derives is a creature of the statute and of grant, and is subject to certain conditions incorporated in the statutes and in the grants. If to-day you should invent an art, a process or a machine, you have no right at common law, nor any absolute natural right, to hold that for seven, ten, fourteen or any given number of years, against one who should invent it to-morrow, without any knowledge of your invention, and thus cut me and everybody else off from the right to do to-morrow what you have done to-day. There is no absolute or natural right at common law, that I, being the original and first inventor to-day, have to prevent you and everybody else from inventing and using to-morrow or next day the same thing."†

Again, quoting from the article on *Copyright* in the *Encyclopædia Britannica*, pp. 356, 357:

It seems that the question of copy-right, or right to copy, represents an old battle-ground. "The nature of the right itself, and the reason why it should be recognized by law, have from the beginning been the subject of a bitter dispute. By some it has been described as a monopoly, by others as a kind of property. Each of these words covers certain assumptions from which the most opposite conclusions have been drawn. As a monopoly it is argued that copy-right should be looked upon as a doubtful exception to the general law regulating trades, and should at all events be strictly limited in point of duration. As property, on the other hand, it is claimed that it should be perpetual. There would appear to be no harm in describing copyright either as a property or monopoly, if care be taken that the words are not used to cover suppressed arguments as to its proper extent and duration. Historically, and in legal definitions, there would appear to be no doubt that copyright, as regulated by statute, is a monopoly."

Quoting again from the same authority, p. 365: "In 1834 was contested in the Supreme Court of the United States the same question which had been so elaborately argued in the English case of *Miller vs. Taylor*, decided by the Court of King's Bench in 1769, and finally settled by the House of Lords five years later in *Donaldson vs. Beckel*, viz., whether copyright in published works exists by the common law, and is therefore of unlimited duration, or is created by and wholly governed by statute. The Supreme Court, following the authority of the House of Lords, held that there was no copyright after publication except for the limited term given by the statute." This judgment has since continued to be the supreme law.

Now, if your author will turn to the Constitution of the United States, Art. I, Sect. 8, Clause 8, he will find that the framers of our Constitution gave Congress the power to promote progress in science and the useful arts by securing to authors and inventors for *limited times* the exclusive use of their respective writings and discoveries.

"On this clause in the Constitution is pinned our patent and copyright laws," as Ex-Secretary Bayard said to me in a recent conversation I had with him on the subject.

Turning to the patent law, it will be found that, to use the words of a learned judge, "A patent is a contract between the inventor and the government, representing the public at large.‡ The consideration moving from the inventor is the production of a new and useful thing, and the giving to the public of a full knowledge thereof by means of a proper application for a patent, whereby the public is enabled to practice the invention when the patent expires. The consideration moving from the Government is the

\* *Traité des Brevets D'invention*; par. C. Renourd, Phillips on Patents.

\* Simond's Manual.

† *Am. H. & L. S. & D. Mach. Co. vs. Am. Tool and Mach. Co.*, 4 Fisher's Pat. Cases, 394. ‡ *Rasom vs. New York*, 1 Fisher Pat. Cases, 222.



grant of an exclusive right for a limited time, and this grant the Government protects and enforces through its courts."

How could the government grant an inventor the exclusive right to his invention if he owns it at common law? Will your author answer that question?

Another argument militates against that doctrine of natural right. "If an inventor has a natural exclusive right to his invention for one moment, he has it forever; and if any limit of time can be set to such a right only infinite wisdom is adequate to so delicate a task. To state the doctrine of natural right thus, is to show that it does not exist. The law has never recognized the doctrine of natural right; for it can not recognize what does not exist."

Admit, for the sake of argument, that an inventor has a natural right at common law to his invention, and that he has a right to leave this valuable property of his to his heirs forever. Then the inventors of pens, ink, paper, linen, cotton cloth, woollen fabrics, etc., etc., etc., should have been protected in the exclusive right to their inventions. By such ruling we would have as many monopolies as arts. And what would be the result? The owners of those huge monopolies would, in time, become immensely wealthy, and arrogant in proportion. Either the rest of mankind would finally become their slaves; or, being in the majority, would rise in their might, stung by a sense of outraged justice, and crush the monopolies into the dust with the iron heel of right. Will your author please tell me which side would be "ethical" under such circumstances, and which "unethical"?

Now, I claim that the proprietary trade is endeavoring to throttle trade under the guise of law. The trade-mark law is the one it is using, or abusing, for this purpose. Knowing that Congress has no right to go behind the Constitution and establish perpetual patents, it seeks to make the trade-mark serve a new purpose never contemplated by law.

The Supreme Court has decided that a trade-mark is for two purposes (1) to indicate *ownership*, as illustrated when one brands his cattle with his trade-mark; (2) to indicate *origin*; illustrated by the branding of pottery to indicate from which establishment the article came from. It was never intended that trade-marks should be used to prevent others from making and selling the articles upon which such marks are branded, and the proprietary trade are therefore using the trade-mark in a manner clearly illegal.

The following questions make this clear:

1st. When the patent for an invention runs out, can the public manufacture and sell the invention under the name by which it is known to the public, or can the inventor still hold the name of his invention as a trade-mark, and thus perpetuate the monopoly?

The House Committee on Patents at Washington, before which I read a paper on the subject of the abuse of trade-marks a few weeks ago, was a unit in saying that the public has a right to make and sell inventions under the names by which they are known to the public when the patents expire. This could not be true if these names were ever trade-marks, for a trade-mark is not the creature of statute like the patent, but it is a thing of natural right and common law; and, therefore, the right to use can not be limited by time any more than a man's right to use his own signature. As every article must have a name, and as the articles referred to have no other names than those claimed as trade-marks, it must be very evident to any logical mind that these claims must fall to the ground.\*

Again, we will admit that, when the patent expires, the public has an equal right with the inventor to manufacture the article. Yet, if the inventor is permitted to retain exclusive control of the name by which the article has become known to the public, the inventor has an unfair advantage over his fellows in making and selling an article to

which he has no greater right than they. By such ruling as the one by which inventors are allowed such a privilege the whole intent of the patent law is defeated.

2d. When a new article is introduced to the market, and not patented, can the introducer hold the only name by which it is known to the public as a trade-mark, and thus be enabled to effect a monopoly perpetual in character, and that, too, without publishing his invention, thus securing patent privileges of a higher character than granted by the patent law?

This question almost answers itself. The Constitution gives Congress the power to grant only limited monopolies. On this clause all the patent legislation has been enacted. It is not likely that Congress would pass two laws so diametrically opposed as the patent and trade-mark laws are made to appear by the proprietary trade. While one promotes progress in the knowledge of things, the other hinders it. One gives inventors the reward of a limited control to inventions under the conditions that such inventions shall be *new* and *useful*, and full knowledge shall be published. The other permits and protects a perpetual monopoly of articles of trade without waiting to inquire whether they are inventions at all.

The courts have decided that when a new article is introduced, theretofore, unknown, it must be christened by a name under which all those who have the right to make and sell the article may do so. This is manifestly *ethical*. For the public has an equal right with the inventors to make and sell the inventions unless they are patented. And when the inventions are patented, the public has the right to make them when the patents expire. To permit inventors to own the only names by which their inventions are known to the public—names which are, therefore, *descriptive* of the articles—names which have become the *proper appellations* of the articles to which they are affixed—names which have passed into the *common language*—is to give inventors an unfair advantage over their competitors in the manufacture and sale of articles to which they have equal right, is to hinder progress in science and the arts, is to create giant monopolies, is to ruin the common language; and finally, when it is applied to medicine, it is to lock up every new and useful discovery to the perpetual exclusive use of manufacturing houses introducing them. Think of the effect of this system on medical nomenclature, on medical text-books, on medical science, and finally on the medical profession itself, then tell me who has the *ethical* side of this question, the author of "Rejoinder" or myself.

Finally, there is another side to this question that "Rejoinder," and others believing as he does, appears not to see. The history of invention shows that, given a certain problem, the laws of the mind are such that many individuals will arrive at a similar solution, and frequently at or near the same time. Any one who has visited the model-rooms of the Patent Office at Washington is aware of this fact.

How is this problem solved? These many minds commence a thorough invention of the subject, using knowledge which they before possessed, or which they acquire by reading the writings of others. The problem once solved, the invention does not exist as a new and distinct creation, but simply the modification of knowledge which is the common stock of mankind. Why should the inventor be granted the perpetual use of knowledge modified in this way, and others, working at the same problem, receive no reward because they were possibly five minutes behind time at the Patent Office?

I think I have said enough to show that what I said in the beginning is true, viz., this question is a political one. I think, unless prejudice has blinded your author's eyes, he will readily admit that the position of the Constitution of the United States is the correct one, which, while not recognizing that inventors possess a natural right at common law to the exclusive use of their inventions, deems it

\* Simond's Manual of the Patent Law, p. 10.

wise public policy to promote progress in science and the arts by securing for limited times to authors and inventors the exclusive use of their inventions, so that capital invested in the perfecting and working of inventions may be protected until such investments prove remunerative ones; yet finally throws the inventions open to legitimate competition.

Yours very truly,

F. E. STEWART.

Wilmington, Del.

### THE CACTUS AS A REMEDIAL AGENT.

*Messrs. Editors.*—In the "Tierras Calientes" of South America, Nature is most fruitful in productions from her most luxuriant Flora, and it is a familiar fact to all who have investigated her contributions in this respect, that the *materia medica* is largely indebted to her gifts for the cure of disease. It would be a waste of time, as well as a work of supererogation, to call the special attention of physicians to the vast number of medicinal agents furnished by the above-named part of the earth's surface. In the ordinary education of the medical man it is a part, and a very important one, of the curriculum of his early studies, to familiarize himself with the history and medicinal properties of these remedies in such common use by the profession, and with which the *materia medica* so copiously abounds.

But as the unceasing contributions of science, particularly of chemistry, have increased immeasurably, the agencies and appliances for use in the profession, and pharmacological science has also added, and continues to add, to the host of remedies for the relief and cure of disease, the researches of the physician are not permitted to stop, but must keep pace with the constantly growing wealth of information that science offers for his benefit, and the benefit of those who may come under his professional care and skill. Notwithstanding the additions to the medicinal pharmacopeia that are all the time being made from these prolific sources, every now and then a new remedy will be presented to the profession and the public which has been plucked from the womb of the fruitful earth by the explorer and student of nature's secrets, and which his untiring energy and research have discovered and brought to light. So persistently has this been, and is being done, that we naturally feel that there is "a cure for every ill, a balm for every wound," and it remains for time, and its faithful coadjutor, man's enterprise and energy, to reveal it and make it available. In no instance within our knowledge have these appliances been more signally successful, and made to serve a better and more humane purpose, than by the revelation of the valuable remedy to which we now invite the attention of the profession. In the more arid regions of Brazil, nature yields indigenously a plant to which botanical science has given the name "cactus." Of this plant there is a large family, many individuals constituting the group. One of this group is the subject of our present consideration, and the knowledge of it, and of its healing properties, dates as far back as the days of the marauding freebooter and plunderer, the Spaniard, and there is no doubt that for an unknown period of time anterior to his invasion it was made use of by the aboriginal Indians of that country for the cure of many of the diseases to which they were subject.

The tradition of the varied virtues and health-restoring powers of the "cactus" has been handed down from generation to generation, and one has only to search the annals of medicine to find out how many of the drugs and medicines now in use have come to us from just such a mysterious and often most humble source. The history of the cactus, as we take it from authority, is an entertaining one in other respects besides its application as a medicinal agent and healer of disease, and many members of the family group present facts of interest con-

nected with the characteristic habits and customs of the people, where they grow and flourish. These will serve to show how they minister to their physical wants and appetites, besides being appropriated as objects of beauty and adornment to the homes of domestic life.

It is proposed to make only cursory mention of a few of the different varieties. The word cactus is from the Greek "*κακτος*," and was applied to some prickly plant, and in the greater number of the species the surface of the plant is furnished with tufts of horny spines, some of which are exceedingly keen and powerful. The tufts show the position of the buds, and the flowers are frequently large and showy and attractive from their brilliant coloring. This is particularly so in the genus "*Pereskia*" and the "*Cereus*." In another group, the "*Opuntia*," a fleshy and edible fruit is produced, and known as the "prickly pear or Indian fig." Other modern genera of the cactus, embracing the "*Melocactus*," "*Mammillaria*," "*Echinocactus*," "*Cereus*," "*Pilocereus*," "*Echinopsis*," "*Phyllocactus*," "*Epiphyllum*," etc., all belong, almost entirely, if not exclusively, to the New World. But some of the "*Opuntias*" are distributed along the shores of the Mediterranean and the volcanic soil of Italy. These plants affect the hot, dry regions of tropical America, and the thickness of their skin and the small number of their evaporating pores or stomata, prevent the moisture from being carried off too rapidly, thus providing for the support of man and animals, where ordinary vegetation could not exist, and other means of subsistence fail. The stems of many of them are filled with wholesome though insipid fluid, and the succulent fruit, not only edible, but agreeable.

In fevers the fruits are freely administered as a cooling drink, and when bruised are regarded as a valuable remedy in ulcers. The Spanish Americans plant the *Opuntias* around their houses, and they serve as impenetrable fences. The "*Melocactus*," melon thistle or "Turk's cap cactus," contains about thirty species, which inhabit chiefly the West Indies, Mexico, and Brazil. The fruit of the melocacti has an agreeably acid flavor, and is frequently eaten in the West Indies. They are distinguished by the cephalum or crown, which bears the flowers. The "*Mammillaria*" are so called because of the teat-like tubercles they present, and from between which the flowers issue. Their colors are either purple, rose-pink, white or yellow, and are often used to adorn drawing-rooms. The "*Echinocactus*," or hedgehog cactus, derives its name from its hard and horny spines. It bears succulent fruit and large and showy flowers, yellow and rose being the prevailing colors. The *Echinocactus Visuaga* attains a large size, and its spines are used by the Mexicans as toothpicks, hence the name "*Visuaga*." Then comes the "*Cereus*," or Torch Thistle, with about 150 species scattered through South America and the West Indies. One of the group, the "*Cereus Pectinatus*," bears a purplish fruit resembling the gooseberry, very palatable, and the fleshy part of the stem—called by the Mexicans "*Cabeza del Viego*"—is eaten as a vegetable after removing the spines. Another of the group, the "*Cereus Giganteus*," the largest of the genus, is a native of the hot, arid regions of New Mexico, growing in rocky valleys and on mountain sides, the tall stems having the appearance of telegraph poles, and reaching a height of fifty or sixty feet. Of the crimson pulp of the fruit of this plant the Pimos and Papagos Indians prepare an excellent preserve; they also use the ripe fruit as an article of food. The *cereuses* also include some of the most interesting and beautiful hothouse plants. The "*Pilocereus*," or Old-man Cactus, is so called because of its hair-like prolongations, which resemble the hoary locks of an aged man. The plants are nearly allied to the *cereus*, and often reach the height of twenty or thirty feet. The "*Phyllocactus*," or Leaf Cactus, consists of about a dozen species, and is found in Mexico and Brazil.

As garden plants they are amongst the most or-

namental of the whole family, the color of the flowers ranging from rich crimson, through rose-pink, to creamy white. The "Epiphyllum" is restricted to two or three dwarf-branching Brazilian plants of extreme beauty. Because of their beauty, the flowers of this plant are much used as objects of adornment, and there is no other virtue specially applicable to them. The "Rhipsalis, the Opuntia and the Pereskia Aculeata, or Barbadoes Gooseberry," embrace the remaining members of the cactus family. The protective kindness and beneficence of nature does not stop at providing for the sustenance of man and the graceful adornment of his home by these useful and beautiful plants, but some of them have been discovered to yield in their succulent juices an elixir by which his diseases are relieved and cured, often of the most formidable character, and that have resisted all other medication. These properties of the cactus have been well known in Brazil and Mexico for many years. Indeed, in the former the tradition of the virtues of the cactus in this direction has been handed down from a very remote period, at least 300 years ago, and as stated in the early part of this paper, long before the Spanish invasion of the country. It is therefore all the more remarkable that so long a time has been permitted to elapse since this important discovery was made, before the healing powers of the cactus were recognized in their antagonism to such diseases as syphilis, scrofula, the various forms of cutaneous affections, rheumatism—indeed, of all diseases resulting from cacœmic conditions, whose name, as we know, is legion! But thanks to American enterprise and energy, to which—though it has been tardy in the application of its forces in bringing this discovery to the knowledge of the people of this country—nothing will henceforth be wanting to disseminate this knowledge, and the comforting thought of another remedy for the cure of destructive and often fatal diseases has been added to the now abundant materia medica, and another weapon has been placed in the hands of the physicians, of whom many have already made known their recognition of its potency in combating and subduing disease. C.

## TRANSLATIONS, GLEANINGS, ETC.

### RETROSPECTIVE THERAPEUTICS.

BY ALFRED K. HILLS.

**Massage in the Treatment of Gallstones.**—A writer in the *Virginia Medical Monthly* relates the case of "a doctor, 50 years of age, who, from exposure, was suddenly stricken down with the usual symptoms of obstruction of the gall-duct. Of course, jaundice followed. He was treated eleven weeks before I saw him. The treatment had been so full and complete, that there was nothing I could think of to suggest, in the therapeutic line, that they had not used. I therefore suggested that we apply the principle of massage to the case. This we did, and after we were through with the movements, it reminded me so strikingly of pumping, that I called it "pumping the liver." I proceeded by placing my hands on the ribs over the liver, making firm and quick pressure downwards, letting up and repeating, say for five minutes, and then requested that it be repeated two or three times during the night. Up to that time no trace of bile had been discovered in the dejections. The following day a large quantity of dark, bilious matter passed from the bowels, soon followed by scores of gall-stones. Improvement set in from that day and continued for at least a fortnight, when from some unknown cause another blockade was on hand. The pumping process was resorted to again, with the same desirable result as on the former occasion. After this the patient experienced no further trouble, and made a complete recovery.

"The principle of the treatment and its application laid down are so simple, and the results in the case above reported were so satisfactory, that the treatment seems worthy of further trial, and reports from those who may adopt it."

**Saccharine for Ammoniacal Urine.**—Dr. James Little, in a paper upon the value of saccharine in preventing the decomposition of the urine in cases of chronic cystitis, states that although it exerts no very marked effect in tubercular cystitis, or in other varieties of the disease not accompanied by alkaline urine, it has been employed with very beneficial effect whenever a highly ammoniacal state of the renal excretion was present. Saccharine, in fact, appeared to act by neutralizing or diminishing the amount of free ammonia in the urine, whether this arose from stricture, paralysis or prostatic disease. The ammonia being kept down or extinguished by the drug, the affection became manageable under the ordinary treatment.

**Condurango Wine.**—Although condurango has not entirely justified the claims made for it in the treatment of cancer, the experiments made with it have demonstrated its utility as a stomachic, and in the form of condurango wine it has grown to be very much in demand, especially in Europe. One fluid ounce of the wine represents sixty grains of condurango bark. Dose, one half to one fluid ounce. Parke, Davis & Co. supply the wine, and also a fluid and solid extract of this drug, and will also mail, on request, a working bulletin on condurango to physicians who wish more detailed information concerning it.

**Thallin in the Treatment of Gonorrhœa.**—Thallin has been largely employed by the Germans as an injection in gonorrhœa. Dr. D'Hercourt, having experimented with the drug (which is a powerful antiseptic), reports very favorably on the effects produced by a one or two per cent. solution of the tartrate of thallin in a saturated aqueous solution of naphthol. He gives one injection daily. He claims that in acute attacks the scalding may be suppressed by the second day, and the discharge by the fifth or sixth day. It is, nevertheless, necessary to continue the injections for some time, and to observe the usual hygienic precautions. He has been enabled to follow up the treatment in forty cases with the most satisfactory results. The treatment may be employed from the very commencement; indeed, it is in the acute stage that it affords the greatest amount of relief.

**Potassium Permanganate in Toothache.**—In the *Russkaia Meditzina*, No. 19, 1887, p. 330, Dr. Prokopy Popoff, of Minusinsk, in Siberian Switzerland, writes that he has most successfully treated upwards of three hundred cases of toothache from dental caries by administering one-twentieth per cent. solution of potassium permanganate in the form of a mouth wash. The following is the formula: Potas. permang., 3 grains; aq. destil. or fontanæ, 1 (Russ.) fl. pound, misce. One tablespoonful to be taken in the mouth every half hour, and to be held therein on the affected side for several minutes. The most agonizing pain is said gradually to disappear in a few hours. The wash acts, besides, as an excellent deodorizer.

**Absinthe in Epilepsy.**—"Absinthe," writes Dr. James Kitchen (*Hahn. Monthly*), "is a remedy that I have now been using for over twenty years in various nervous affections, more especially in epilepsy. I refer particularly to epilepsy and epileptic affections, from the fact that I have derived more benefit from absinthe in mild and in severe attacks of that disease than in other cases in which I have been in the habit of administering it. I was induced to give it in such cases from various accounts I met with in French papers and journals of its effects when used as a common drink among the French people. Its deleterious effects when thus taken were chiefly noted on the nervous system. The hospitals and asylums of France were filled with inmates suffering from every grade of nerve poisoning as a result of its use.



"As I have said already, my chief use of the remedy has been in epilepsy, though I have given it frequently as a nerve tonic. In the latter class of cases I have usually administered it in appreciable doses of several drops in water before meals. My chief remedy in the treatment of epilepsy, however, is the bromide of ammonium. I prefer it to the other bromides, after an experienced use of all; but, as mentioned above, I have used the absinthe when the bromide failed, and in some few cases with better results."

**Arnica in Laryngeal Fatigue.**—By laryngeal fatigue is meant an exhausted condition of the laryngeal muscles, which may be temporary or more or less permanent, and presents itself only in a certain series of cases (Dr. Isaac Barton, in *Med. Bulletin*). It certainly has not been given the attention it deserves, and is far more frequent than we have any idea of. The individuals who suffer from laryngeal fatigue are nearly all professional singers, or, at least, those who make constant use of the voice, such as preachers, public speakers, auctioneers, etc. The professional singer will complain of a huskiness of only certain notes in his or her compass, and these notes are usually grouped together. The notes complained of are usually in the upper third of the compass of the vocalist, the alto and bass voices being affected correspondingly as the soprano and tenor voices are. These notes are usually two or three in number, but some will complain of only having one note affected, and on this note they will "break" while singing. The trouble is due entirely to muscular fatigue from overwork of the laryngeal muscles. We frequently find professional solo-singers giving a history of two, three and sometimes six months' duration of the trouble. When the certain note or notes become "raspy," these alone remain so—all others in the singing compass being normal—by reason of the laryngeal muscles being fatigued, and refusing to place the local bands in certain positions to produce the given number of vibrations for the note or notes complained of. Preachers, lawyers, etc., will complain of a constant huskiness of the speaking voice. When examining the patient with the laryngoscope, it is necessary that we should have them vocalize, slowly and with care, the ascending chromatic scale until we find on which note or notes the trouble is visible. When we are able to get a view of the interior of the larynx under favorable circumstances, we find it normal, with the exception of a slight congestion of the ventricular bands, and a somewhat discolored condition of the anterior portion of the vocal bands. As the patient in vocalizing reaches the note or notes affected, the anterior free edges of the vocal bands become congested, and, indeed, often livid in color, and as these notes are passed the color will fade. Sometimes we find the membrane of the ventricular bands to be somewhat dry in character, and the patient will complain of coughing and expelling small pellets of mucus. Seldom any other complication is noticed in these cases. At a meeting of the British Laryngological Association, Mr. Kenneth Millican, M. R. C. S., called attention to the internal use of the tincture of arnica in laryngeal fatigue. Dr. Barton has placed a large number of cases upon this treatment, in private as well as in hospital practice, and has found much success from it. Local treatment, he says, is of no service except where we find thickening or ulceration of the membrane of any portion of the larynx. He gave three drops of the tincture of arnica in a small quantity of water three times a day. The erysipelatous kind of rash which he found the treatment was apt to induce in some persons, will not occur if the tincture is made, as it always should be, from the root instead of the leaves of the plant.

**Carbonic Acid Gas as an Antidote to Malarious Fevers.**—Dr. Charles G. R. Naylor, civil surgeon, of Burmah, India, addresses a report to the deputy surgeon-general of British Burmah, in which he asserts that carbonic acid gas is an infallible antidote to malarious fevers of all types and durations. Dr. Naylor's report is republished in

Edinburgh. It was first made eight years ago, but is now put forth again in an enlarged form, and with the emphasis and confidence drawn from a fuller experience.

Dr. Naylor does not claim originality for his treatment. It was devised or discovered by Dr. John Parkin, of London, who tested its value while visiting the malarious districts of Italy, Spain and West Africa.

The gas is administered in solution, and is got in its cheapest form by dissolving bicarbonate of soda, gr. xxx, in three ounces of cold water, and throwing into the solution tartaric acid, gr. xx, in a powdered state, the mixture to be stirred rapidly once, and swallowed as soon as possible in a state of effervescence. The patient must be made to lie down immediately after, to prevent eructation and escape of the gas.

The doses of soda and acid must be decreased to suit the different ages of children, as grs. xxx of bicarbonate of soda are not soluble in the small quantity of water suitable for administration in one dose to very young children. Sometimes the soda is given first and followed by the acid.

The remedy is best administered just before the paroxysm is expected, or in the remission if the case be one of remittent fever. Dr. Naylor cites a long list of cases cured by the gas.

**Styrone.**—Styrone has been studied for the last eleven years by Dr. Beach (*N. W. Lancet*) in the Massachusetts General Hospital. It is a compound of liquid storax and balsam of Peru. Applied unmixed to a raw surface it is somewhat irritating, but in emulsion with water, liquid vaseline or olive oil, it is an agreeable dressing, a prompt deodorizer, and in an eight per cent. solution a reliable antiseptic, according to Dr. Beach, capable of completely disinfecting a foul and ulcerating surface. In the pleural or peritoneal cavity weaker solutions in water, 1-50, 1-100 or 1-200 may be safely and effectively used. In the form of a four per cent. spray, it sometimes gives great relief in phthisis, and its action upon the cholera bacillus outside the body leads to the hope that it may prove a valuable internal remedy in cholera.

**Cocillana in Diseases of the Lungs.**—Cocillana is the bark of a tree—a species of guarea, of the family meliaceae. Like its near relative, the goanese ipecac or naregamia alata, of India, it is used at the place of growth as an emetic and purgative (very rarely the latter), and is poisonous as an irritant-narcotic in over-doses. It contains apparently an alkaloid. It acts locally upon the mucous membrane, either when directly applied or when absorbed. It is excreted very slightly through the skin.

From an analysis by Dr. D. B. Stewart (*Med. News*, Aug. 24, 1889) of the histories of forty cases in which cocillana was prescribed, it results that this drug is serviceable in bronchial catarrh, especially the subacute and chronic forms, when accompanied by scanty or moderately profuse secretion, whether the cough be tight or loose. It seems to possess the power to render cough less frequent and difficult, and the bronchial secretion less viscid and more easily expectorated, while at the same time diminishing its amount.

Perhaps the best preparation of cocillana for administration is the fluid extract, because of the relative smallness of the dose; seven and one-half minims of it equal about half a fluid drachm of the concentrated tincture. About three-fourths to one fluid drachm is an average dose of the latter.

**Phoradendron in Diseases of Women.**—Dr. Phil. Porter, in the *Hom. Journal of Obstetrics*, writes of the mistletoe: "The European and American species doubtless possess identical or very similar properties. It is probable that the American species [phoradendron] will be found better adapted to American disorders, just as I believe the American species of pulsatilla is superior to the European, in diseases of women who are born in this country."

"Among its symptoms we find, in obstetric practice, weak

pains (where it must be compared with *actæa rac.*, *caulophyl.*, *puls.* and *secale corn.*), also in adherent placenta. In diseases of the female sexual organs, hemorrhages accompanied by pain, blood partly red and partly in clots; hemorrhages with violent, contractive, labor-like pains; hemorrhages, continual, at one time in a stream, at another in clots of a blackish color.

*"Pains, periodic, proceeding from the sacrum into the pelvis, worse in bed, accompanied with tearing, shooting pains from above downward in both thighs as well as in the upper extremities, with sleeplessness and general prostration."*

*"Metrorrhagia at the climacteric. Areolar hyperplasia. Subinvolution."*

Its action on the ovaries, especially the left, is to relieve dull, heavy, sagging pain. In one case of a young married lady, five months pregnant, who complained of a dull, heavy distress in her left ovarian region immediately after coition, mistletoe, five-drop doses, relieved in a short time. In one other clinical case of the same nature, pain in the ovarian region after coition, mistletoe cured in two weeks."

Dr. E. M. Hale (*New Remedies*) says of the above italicized symptoms of phoradendron, that he has verified them many times. In his obstetric practice, he has found it superior to *ustilago* in inefficient labor pains, as well as severe after pains.

**Nutrolactis—A New Galactagogue.**—This is a preparation recently placed on the market, and said to be composed of *galega off.*, *galega apolinea*, *tephrosia virg.* The following cases are given as bearing on its effects by Dr. B. F. Jones, in the *Med. Brief*:

CASE 1. Mrs. J., an American, aged twenty-eight years; has always enjoyed good health; tolerably robust; the mother of five children, the first and third of which were still-born; the second and fourth she was unable to nurse longer than six or eight weeks, one breast being disabled on account of retraction of nipple, and the lacteal secretion completely ceasing in the other at this time.

When the last infant was about eight weeks old, and as usual her milk was failing her, and in addition thereto being of very poor quality, I prescribed nutrolactis. In less than one week the mammary secretion had increased to that extent that she was now almost able to fully nourish her infant from the one breast. Judging from the appearance of her fat and vigorous infant, which is now more than five months old, the quality of her milk is highly nutritious.

With her all of the so-called galactagogues had been tried with invariably negative results.

CASE 2. Mrs. R., also an American, aged twenty years, primipara, of delicate constitution and somewhat anemic, was the subject of defective lactation from the beginning, one breast being disabled by abscess, and the secretion of milk never becoming fully established in the other. The infant came near starving to death before the true cause was ascertained and the use of the bottle commenced.

My attention was called to this case when the infant was about eight weeks old. The mother informed me she was not giving half enough milk to nourish her babe, and what she did give seemed to be of poor quality. I at once prescribed nutrolactis, and requested her husband to report results at the end of four days. He did so, and informed me that she had about discarded the use of the bottle. In about one week she laid the bottle aside, being now able from the one breast to fully nourish her infant. Under the use of it her health, as well as the condition of her infant, has greatly improved.

Aside from its galactagogue properties, it is an efficient general tonic, improving the appetite, digestion and assimilation.

Dr. Robert Millbank, visiting physician to the New York Infant Asylum, reports (*N. Y. Med. Jour.*, November 16, 1889) that, having had occasion to try about every

galactagogue used by the profession, and having often been disappointed in the results, he has found nutrolactis, after more than a year's use, more satisfactory than any galactagogue he has hitherto employed. After quoting several cases from the history books of the asylum, he goes on to say: "We have had several women whose supply of milk was insufficient, but after taking nutrolactis they have been able to nurse two children."

"The women who take it all say that it positively adds to their flow of milk. As it is not particularly agreeable to take, containing little alcohol, I believe that their praise of it is not due to bias on account of palatability; and, as the facts in our tests seem to bear them out, I believe their statements. \* \* \*

"We are now using about a dozen bottles a week. The dose is a tablespoonful two or three times daily. I hope that its use may be of benefit in the hands of some of my brethren who may be tempted to try it from what I have said about it."

**Hypnotic Suggestion in Labor.**—Professor S. Ramon Cajal, of Barcelona, reports (*Medicina Practica*, Sept. 28, 1889), a case in which he abolished the pain of labor without in any way weakening the power of the uterine contractions by means of hypnotic suggestion. The patient was a robust woman who had already had five children. Although Dr. Cajal warrants her as not in the least "nervous" in temperament, it should be noted that she had been the subject of frequent experiments in hypnotism; in fact, she could be thrown into a trance by a mere effort of will. Ten days before her sixth confinement was due, Dr. Cajal "suggested" to her during hypnotic sleep that her labor would be short, and that she would feel little or nothing of it. She obeyed the suggestion to the letter, the dilatation of the os, the rupture of the membranes, and the expulsion of the fetus being all accomplished in less than half an hour. The patient is said to have had full consciousness of the contractions of the uterus, but without any sensation of pain, although the pulse was quickened and the breathing became labored, as is usual under the circumstances; so little did she suffer that it was difficult to keep her awake during the last stage. When all was over, she walked to bed with a firm step, and soon afterwards asked for something to eat. She suckled the child on the second day, got up and resumed her domestic duties on the fifth, and was perfectly well within a fortnight from the date of lying-in.

Dr. Cajal points out the peculiarity that the rapidity of the process in this case was not less noteworthy than the absence of pain; and this was the more remarkable inasmuch as her previous confinements had all been very long. He describes the effect of the hypnotism as having been to paralyze the nerves of pain while leaving the perception of tactile impressions and the muscular sense unaffected. He suggests, as a further development of this new addition to obstetric therapeutics, that it may be possible to effect delivery during hypnotic sleep.

**The Constituents of Lycopodium Seeds.**—A number of interesting studies have been recently published as to the constituents of lycopodium seeds. Langer found in the spores 49.34 per cent. of oil, which contained glycerides of two new acids, having the formulæ of  $C_{14}H_{24}O_4$  and  $C_{11}H_{20}O_4$ . The first spores yielded only the former acid, older spores only the latter.

From the comparison of the therapeutic action of these two fatty bodies, the explanation will perhaps be found of the remarkable fact that sometimes in vesical catarrh, gonorrhœa, etc., lycopodium seeds possess most positive properties, while in the majority of cases they are without value.

On account of the ready decomposition of the oils, they should be administered in capsules for therapeutic purpose.

## MISCELLANY.

—Another physician has fallen a victim to the cause of science under most painful circumstances. In August last a man suffering from glanders was admitted to the Vienna General Hospital. He died shortly afterwards, and a military surgeon, Dr. Rowlaski, who has spent many years examining bacilli of all kinds, undertook to subject the dead body to a close examination. He soon succeeded in finding the bacillus, which he reared, to watch the manner of its growth and its vitality. An ambitious young physician, Dr. Hoffmann, expressed his doubts as to whether the bacillus reared artificially had still in it the power of infection. Dr. Rowlaski gave him some of the cultivations, and Dr. Hoffmann soon saw that the poison was still active. All the animals he injected with it died of glanders. At the beginning of October Dr. Hoffmann caught cold, and felt acute pains in his side, for which he injected morphia subcutaneously. He did this with the syringe which he had used for injecting the glanders poison into the doomed animals. Although it had been disinfected in glowing heat, some particles of the poison must have still been in it, for glanders soon developed in its most malignant form, and the young physician died in the Vienna Hospital after a most agonizing illness.

—Dr. Huidekoper, a leading authority in veterinary medicine, says that half the consumption in the country is due to tuberculous cattle.

—It is a curious fact and known to few, that J. G. Whittier, the poet, is completely color-blind. He sees absolutely no distinctive colors at all, and, so far as his outer senses are concerned, this lovely world might be one delicately shaded but invariable gray.

—Dr. Black urges that when a person has reached a stage of abnormality at which he can not do without alcohol it is better to have him substitute morphine. The reasons for this change which he presents are: First, economy; second, less annoyance to his family and neighborhood; third, less liability of transmitting the neurosis or tendency to this disorder; fourth, a great sanitary saving to the State in diminished crime and social disturbance; fifth, greater longevity and more happy and peaceful death.

—A gentleman of East Somerville, Mass., recently stepped upon a needle, which broke off in his flesh, and could not be removed. He was taken to an electric-light dynamo, and holding his foot in close proximity to the machine the needle was withdrawn.

—MM. Magnan and Saury report three cases of hallucination due to the cocaine habit. According to the *British Medical Journal*, one patient was always scraping his tongue, and thought he was extracting from it little black worms; another made his skin raw in the endeavor to draw out cholera microbes; and the third, a physician, is perpetually looking for cocaine crystals under his skin. Two patients suffered from epileptic attacks, and a third from cramps. Two of these patients had resorted to cocaine in the vain hope of curing themselves thereby of the morphine habit.

—A system of inspectorship has been adopted by the Board of Trustees of the Morristown Hospital, in Philadelphia, for the purpose of preventing, as far as possible, cruelty to patients. Alcoves have been built, in which inspectors will be placed. From these look-outs the doings of the attendants all over the wards can easily be seen, and any dereliction of duty will be promptly reported. The system is ready for practical operation.

—Prof. Parvin regards creolin as preferable to any other antiseptic in obstetrics. He employs it in the strength of one teaspoonful to a pint of water.

—Dr. Strong, Chief of Staff, W. I. Hospital, reports 861 patients under treatment during the month of February, mortality 2.79 per cent. Appointments on the House Staff will be made on May 1st.

—The following additions have been made to the Faculty of the New York Post-Graduate Medical School and Hospital: Charles B. Kelsey, M.D., Professor of Rectal Diseases; Charles H. Knight, M.D., Professor of Laryngology and Rhinology; Reynold W. Wilcox, M.D., Professor of Clinical Medicines; Dr. S. Lustgarten, formerly Privat Docent in Vienna University, Instructor in Syphilis and Dermatology.

—Dr. Selden H. Talcott, on the nomination of Dr. Jules Morell, Superintendent of the Insane Asylum at Ghent, has been elected an associate member of the Society of Mental Medicine of Belgium.

—Mr. John Carnrick, the originator of the *Dietetic Gazette*, has again assumed entire control of the journal. The *Gazette* is ably edited, always full of interesting matter, not only to the physician but family, and well worthy of the success it has achieved.

—The late Sir William Gull, the famous Court physician, left a fortune of \$1,750,000. Thirty years ago he was an unknown hospital doctor, living from hand to mouth.

—A Massachusetts philanthropist has recently donated \$3,000 to the Westbro Insane Asylum, in appreciation of the excellence of the hospital, for a new cottage for those very sensitive patients who would be benefited by greater freedom and exclusion from the more violent.

—Magnesium is one-third lighter than aluminum, at the same time more dense, harder and tougher. An article made from German silver weighing 5.5 kg., weighs only one kg. if made of magnesium. Atmospheric influence is about the same on magnesium and aluminum; but while alkalies, such as ammonia or soda, attack aluminum considerably, magnesium is not affected by them at all. Magnesium is worked into objects having sharp edges, such as screws, etc., more readily and with better results. It takes a high polish, is readily hammered and rolled, can be swaged or pressed like tin into any shape. It is at present about one-fifth cheaper than aluminum.

—The assistant examiner of Chinese customs service, has sent to the treasury department, here, a printed list of Chinese medicines exported from Yangste ports. Among the remedies are tigers' bones, ground blood, bear's gall, asses' glue, tree bugs, elephant's gall, fossil teeth, fowls' gizzards, "insects of nine smells," job's tears, cow-hair, glass, rhinoceros horns, cow's knee, puff balls, dragons' teeth, straw, hedgehog skins, dried silk-worms, snake-skins, crabs' eyes, horse-tails, and centipedes.

—When urine is sometimes clear and normal, but at other times contains pus, occasional blocking by a renal calculus of the ureter which leads from a diseased kidney is indicated.

—A persistent fissure in the middle of the upper lip is a very suspicious sign of a scrofulous diathesis.

—Wounds giving off sanious discharges, when dressed with cabbage leaves promptly take on a healthy action and assume a better aspect.

—The following is an extract from a petition, written in "English as She is Spoke," by a native East Indian to the Governor of his province: "That your lordship's honor's servant was too much poorly during the last rains, and was resuscitated by medicines which made magnificent excavations in the coffers of your honorable servant, whose means are circumscribed by his large family, consisting of five female women and three masculine, the last of which are still taking milk from mother's chest, and are damnably noiseful through pulmonary catastrophe in their interior abdomen."